

ATLANTIC FISHERMAN

MAY
1951

RIGGED for RUGGED SERVICE with COLUMBIAN *Pure* MANILA



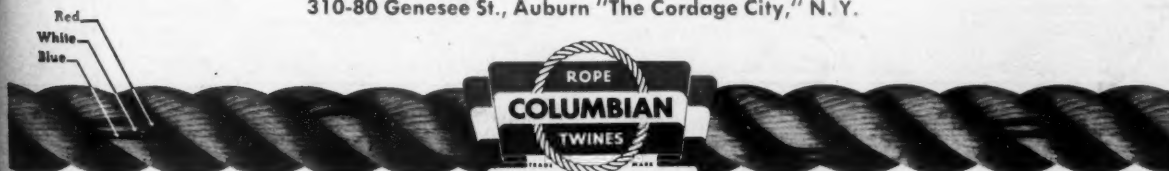
FIRST FOUR LST's converted for coal and ore

First of four 328-foot LST's converted for intercoastal shipping, the M. V. Guaranesia, imposed unusual marine engineering problems which were skillfully handled by Higgins, Inc., at New Orleans. The converted ship has a hold capacity of 138,700 cubic feet, develops 1,800 shaft hp, and attained a speed of 13.4 knots on the trial trip.

The four new ships will be operated by Empresa Internacional de Transportes, Ltda., a Brazilian firm, for shipping coal, ore and other heavy bulk. Two sets of kingposts have been installed and fitted with five-ton cargo booms.

Columbian manila lines have been chosen for outfitting the line gear of these ships.

COLUMBIAN ROPE COMPANY
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Boston Office and Warehouse

38 Commercial Wharf

GM DIESELS POWER THE "HIGHLINERS"



57' x 16' 4" x 8' "Pamela Rae," built to the Alaska limit by Sagstad Shipyards, Seattle, has a pay load capacity of 55,000 lbs. of iced fish. A GM 6-71 Diesel turns a 50 x 32 wheel through 4.38 to 1 reduction gears.

HIGHLINER in its first halibut season, Capt. Magnus Martens' new boat "Pamela Rae" is one of the many new combination-type fishing vessels powered by a GM Diesel engine.

In trial trips before leaving for Alaskan waters, "Pamela Rae" did $8\frac{1}{2}$ knots easily at 1600 RPM and $9\frac{1}{2}$ knots at 1800 RPM.

Capt. Martens picked GM power for his new boat because of three years' satisfaction with another

GM Diesel engine in the "Lorelei II" which he and his brother owned.

General Motors Diesel engines are the favorite choice of experienced fishermen because two-cycle operation makes them more compact, quicker starting, smoother and livelier, easier and more economical to maintain.

For the complete story of this modern two-cycle Diesel power, consult your local GM Diesel distributor or dealer, or drop us a line.

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SINGLE ENGINES... Up to 275 H.P. DETROIT 26, MICHIGAN MULTIPLE UNITS... Up to 800 H.P.

GENERAL MOTORS



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Why this two-boat fleet joined the "49'ers"

Here is why the *Ellen J.* and *Dauntless* out of Norwalk have been repowered with great new Fairbanks-Morse Model 49 Diesels. In their owners' words, Model 49's were the choice because of . . .

"Elimination of vibration, increase in safety conditions, economy of operation and dependability under demanding conditions."

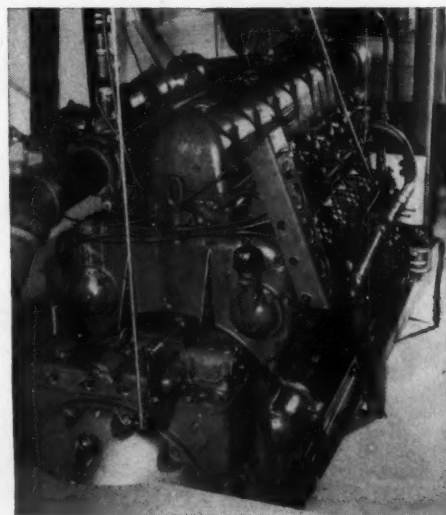
These are good reasons for you to consider Model 49's for marine power in the 20 to 150 hp. class. For the complete story on Model 49 advantages, see your Fairbanks-Morse representative or write Fairbanks, Morse & Co., Chicago 5, Illinois



FAIRBANKS-MORSE

a name worth remembering

DIESEL LOCOMOTIVES AND ENGINES • ELECTRICAL MACHINERY • PUMPS •
SCALES • HOME WATER SERVICE EQUIPMENT • RAIL CARS • FARM MACHINERY



120 hp. Model 49 Diesel as installed in *Ellen J.* and *Dauntless*. Noted as the easiest-to-maintain marine diesel, Model 49 can be completely overhauled in a few hours. Cylinder head, liner, piston and rod assemblies removable without dropping oil pan. Complete marine accessories available.

Scientific Approach to Fishing Aids Industry's Progress

Reviewing the progress of the fishing industry before the recent annual meeting of the Fisheries Council of Canada, R. W. Mayhew, Canadian Minister of Fisheries said:

"Competition for the resources of the seas is increasing and large-scale fishing is undergoing a rapid revolution. The range of the ships is much greater than before. Their gear is more effective and they can range their trawls through a wide variety of depths. In a few years they have found new ways of finding fish, with depth finders, asdic, sonar, radar and loran. Some even carry an aeroplane or helicopter to extend their range for spotting surface schools of fish.

"In the last five years, the fishing industry of the world has made more progress than it did in the past twenty-five. The big fishing nations in Europe, and probably in the Far East, can go farther now after cheaper fish than they did before.

"Hitherto, the vast distances hindered competition but with new ships and gear, from either Europe or Asia, local fish populations can be subject to increased fishing."

The progress of the fishing industry in the United States has shown marked strides since World War II. For example, the use of modern navigating and communicating instruments has been greatly accelerated. Radiotelephones and depth recorders have become commonplace even on small boats, loran has become widely accepted for larger offshore fishing vessels, and radar is rapidly gaining in popularity.

Fishermen are looking more and more to naval architects for designing their boats, realizing that professional planning insures proper construction, maximum seagoing qualities and efficient operation. Improved paints and seam compounds, rust preventatives, wood preservatives, longer lasting fastenings and special deck coverings are in greater demand.

Advantage is being taken of the latest developments in propulsion equipment. There is a definite trend toward the use of greater horsepower for handling heavier fishing gear, in deeper waters, and for providing added speed in making longer trips. New type pilot house controls for engines, and safety controls for electrical equipment, are being employed to an increasing extent.

Living accommodations aboard fishing boats have been greatly improved, particularly with respect to toilet and lavatory facilities. Many boats now have shower baths, and radiation type heating has been widely adopted. Galley facilities have been modernized with fresh water systems and mechanically refrigerated food storage.

More attention is being given to safety in the form of life boats, davits, life rafts, distress signals and fire extinguishing equipment.

The latest developments in fishing gear are being utilized. These include the use of Nylon nets and twine, improved net floats, mechanical gurdies, new winch drives, suction pumps, scaling machines, etc.

Fish holds have been improved by the better use of insulating materials. Some boats have mechanical refrigerating equipment, and others are equipped to freeze their catches at sea.

All of these advancements in fishing boat design, construction and equipment indicate a healthy outlook for the industry. They show it is awake to opportunities for going ahead. Whereas fishing was once largely a matter of chance, it now has become a science. The present day fisherman, in order to operate profitably, must have a well-fitted boat and take full advantage of the available mechanical and scientific aids to fishing.

By having a modernly equipped fleet, the domestic industry will be able to harvest its share of the ocean's fish supply, and its catches can be landed in prime condition, which will assure a ready market.

ATLANTIC FISHERMAN

REGISTERED U. S. PATENT OFFICE

The Magazine for Fish and Shellfish Producers
On Atlantic Coast, Gulf of Mexico, Great Lakes

VOL. XXXII

MAY 1951

NO. 4

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F. G. LAMSON
President

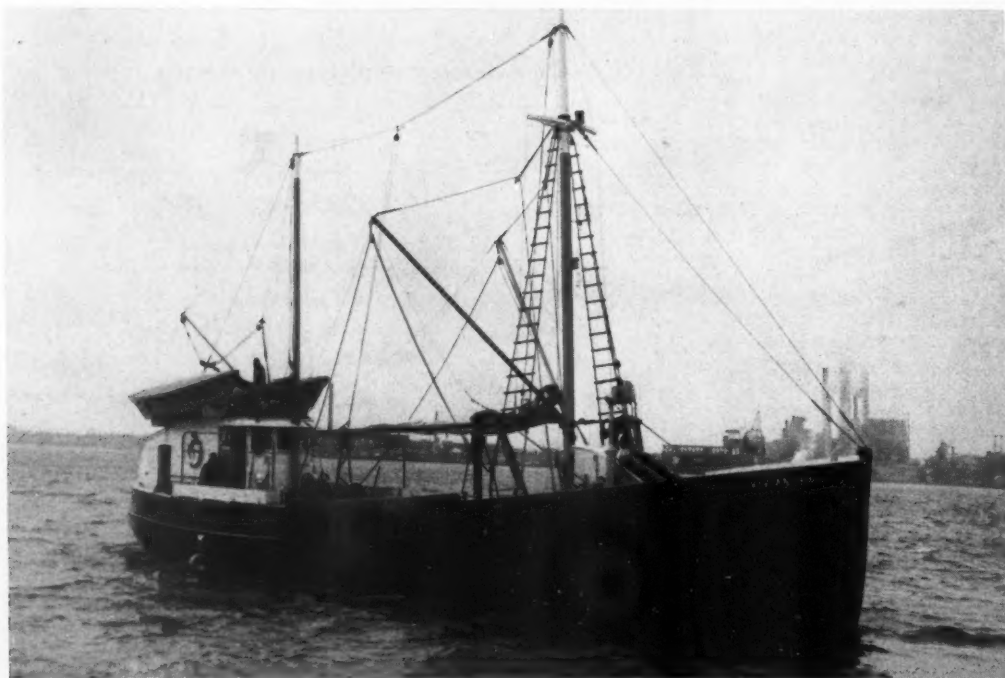
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WOLVERINE Diesel Powers the New Scalloper Vivian Fay



Owned by the Victoria Fishing Corp., New York City
Fishes out of New Bedford, Capt. Haakon Eilertsen

The new 76-foot Bristol-built, Condon-designed scallop dragger "Vivian Fay" has started a fishing career that is destined to be successful. She has been acclaimed a sturdily-built, well-fitted, seaworthy boat. A vital part of her modern equipment is Wolverine propulsion power—an $8\frac{1}{2} \times 10\frac{1}{2}$, 6 cylinder Diesel rated 225-240 hp. at 600-650 rpm., with 2:1 reduction gear.

This engine gives the "Vivian Fay" plenty of dependable power, and will assure her owners long years of trouble-free, economical operation.

Wolverine manufactures an extensive line of

heavy duty Diesels. Medium speed engines are available in the 120 to 320 hp. range; and slow speed, 400 rpm. engines are made in several sizes up to 320 hp. Wolverine now also offers three compact light-weight Diesels with ratings from 125 to 275 hp. For full details write

Wolverine Motor Works, Inc.

35 Union Ave.

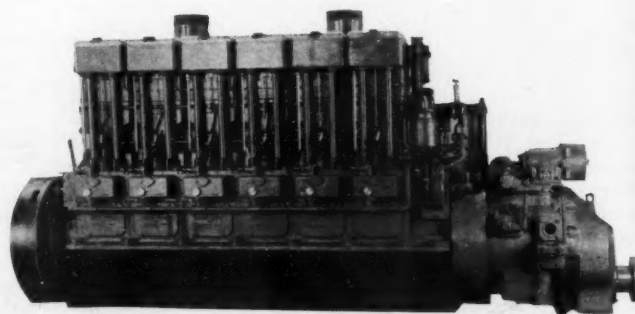
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Factory representative, W. H. White, 42 Oxford St., Fairhaven, Mass.
Telephone New Bedford 4-3950

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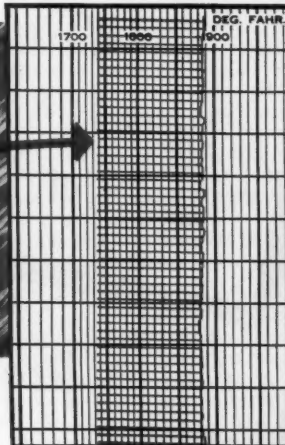


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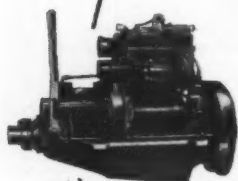
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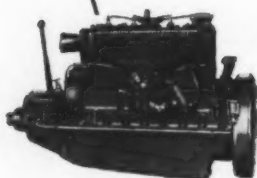
Profit by the famous Dependability of a **UNIVERSAL** **100% MARINE MOTOR**



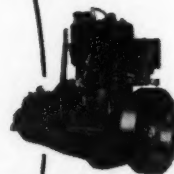
Blue-Jacket Twin. Always a favorite for small boats because of its real economy and lasting performance. 12 h.p.



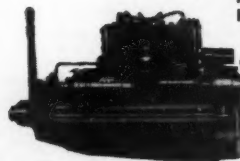
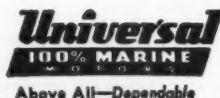
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Sounding-Lead

NORTH ATLANTIC TREATY MEETING The first meeting of the International Commission for the Northwest Atlantic Fisheries which convened at Washington, D. C. on April 2, concluded its work at a final plenary session on April 10. The Commission was established to conduct scientific investigations into the fisheries of the Northwest Atlantic and to recommend regulatory measures, if found necessary as a result of the investigations.

The Commission elected United States Commissioner Hilary J. Deason, chief, Office of Foreign Activities, Fish and Wildlife Service, as chairman; and the United Kingdom Commissioner, A.T.A. Dobson, fisheries adviser, Ministry of Agriculture and Fisheries, as vice-chairman. These officers will serve for a term of two years.

William R. Martin, senior biologist at the St. Andrews Biological Station of the Fisheries Research Board of Canada, St. Andrews, N. B., was appointed acting executive secretary for the period July 1, 1951 to June 30, 1952.

The Commission established standing committees on finance and administration, and research and statistics. These committees are headed by J. Howard MacKichan and Dr. A. W. H. Needler of Canada respectively. The Committee on Research and Statistics will co-ordinate research in the various countries and advise the Commission as to research and statistical collections.

Francis W. Sargent of Orleans, Mass. was elected chairman of the sub-area which takes in the Gulf of Maine and Georges Bank.

With a view to the establishment of effective working arrangements between the Commission and other international organizations with related objectives, the Commission authorized its chairman and executive secretary to enter into interim arrangements with the Food and Agriculture Organization of the United Nations and the International Council for the Exploration of the Sea for the exchange of information and for other types of cooperation.

The Commission agreed, for the time being, to establish its headquarters in Canada, at the St. Andrews Biological Station of the Fisheries Research Board of Canada.

TRADE AGREEMENTS BILL The Senate Finance Committee has reported out HR 1612, the Trade Agreements Extension Bill previously passed by the House with amendments. The Senate Committee retained the "peril point" amendment with a minor change and two of the three amendments contained in the House bill.

The most important of the retained amendments is the one containing the "escape clause" which the Committee re-drafted to meet certain objections to the House version. The new version retains the import quota as a remedy against injury as provided in the House bill. It also calls upon the Tariff Commission to conduct an investigation and make a finding of fact, even if it dismisses an application. The Tariff Commission must also make public its reasons for denying a remedy in the event that it does so in any application.

If the Tariff Commission does recommend a remedy to the President and if he refuses to carry out the Commission's findings and recommendations, the President must report his reasons for failing to abide by the recommendation to the Finance Committee of the Senate and to the Ways and Means Committee of the House.

The Finance Committee bill also retains the criteria of injury contained in the House bill such as a decline in production, employment, wages or sales and an increase in inventories and adds two or three others, including a decrease in profits.

The right of judicial review is restored in the Finance Committee's version by reinserting Section 516 of the

Tariff Act of 1930. The President is authorized in the case of perishable commodities to take emergency action without awaiting a Tariff Commission recommendation.

FROZEN HOLDINGS Stocks of frozen fishery products held on April 1, 1951 by the Fish and Wildlife Service totaled 96,366,000 lbs.—9.2 million lbs. more than were held on the same date in 1950, but 10.5 million lbs. less than were in storage on March 1, 1951.

Substantial increases were shown on April 1 this year over last April in haddock and rosefish fillets, scup, scallops and shrimp; with decreases for whiting fillets, headed and gutted whiting, sea trout and lake herring.

It was estimated that holdings of frozen fish and shellfish on May 1, would total 88 million lbs.

NORWEGIAN FACTORY SHIP Norway's largest and most modern trawler, the new *Moretraal I*, is owned jointly by the crew, fish exporters, and the municipality of Kristiansund, one-third each. Built in Kiel, Germany, at a cost of about \$280,000, the 630-metric ton trawler is a self-contained floating factory, designed to utilize every particle of the catch. It is equipped with machinery to produce 20 tons of fish meal a day, and also has an oil extracting plant aboard, as well as ample refrigeration facilities.

Moretraal I boasts the latest in electronic devices and other modern instruments, including two echo sounders. One of these is coupled to a radar screen, which besides giving accurate depth readings, enables the ship master to determine not only the position and concentration of fish shoals, but also the size and shape of the individual fish. Thus, it is possible to see whether the prospective booty consists of cod or herring, or other fish.

Local interests in Kristiansund have ordered two more trawlers of the same type as the *Moretraal I*. These, too, will be cooperatively financed and operated.

NEW NFI HEADQUARTERS The National Fisheries Institute has acquired a building at 1614 20th St., N. W., Washington, D. C., for its permanent headquarters. The purchase of the building was authorized by the Fisheries Institute Board of Directors at their meeting in Boston. N.F.I. expects to move into the new building sometime before June 30.

NEW LORAN CHART Loran Chart 6611-L, Cape Race to Cape Sable, has just been issued by the Hydrographic Office of the U. S. Navy, Washington 25, D. C., and may be obtained for \$1.50 per copy. This chart, published partly in response to the needs of the fishing industry, shows all soundings, limits of fishing banks, and magnetic and true compass roses. The scale of the chart is about 11 miles to the inch, and is adequate for most fishing operations.

FIRTH IN INDONESIA Frank E. Firth of Milton, Mass., has accepted a two-year assignment with the Economic Cooperation Administration to go to Indonesia as fisheries officer and advisor to the Ministry of Fisheries and Forestry of the Indonesian Government.

The Indonesian Government is undertaking a five-year development of its offshore and inland fisheries, and he will assist in developing the program and in training Indonesian fisheries specialists. Firth has been a consultant to manufacturers of marine and fishery products, and was formerly a fisheries biologist and technologist for the Fish & Wildlife Service.

REPRICING OF CANNED FISH Higher costs can be reflected on all domestic packs of canned fish under the Manufacturers' Order, CPR 22, which becomes effective May 28. This permits adding of the increase in direct labor and higher can, case and other supply costs to the price in base period (April-June quarter of 1950, or the price in any one of the three preceding quarters). The regulation
(Continued on page 53)



THRIFTY ON FUEL...

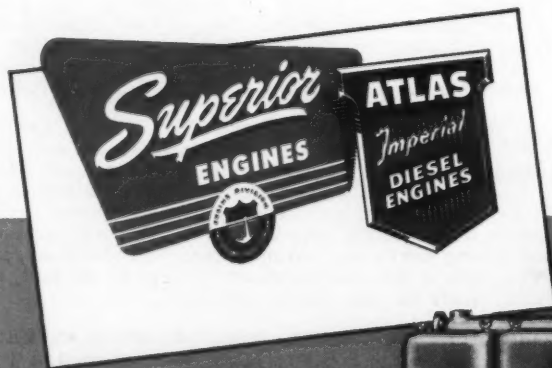
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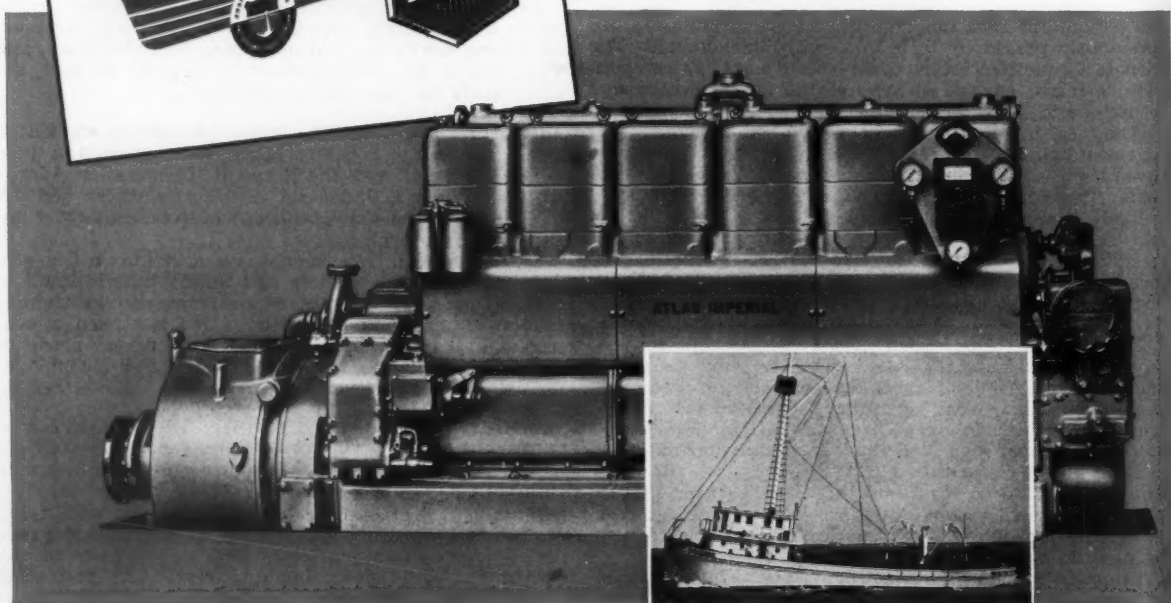
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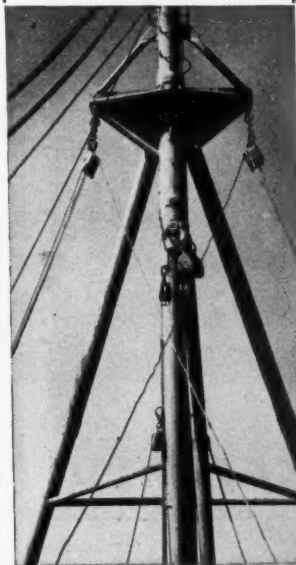
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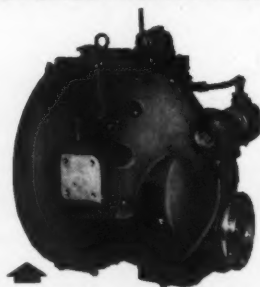
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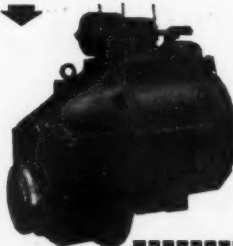
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MINIMIZES SPACE NEEDS — #3706 for high-speed air-cooled and water-cooled engines from 4 to 15 h.p. This gear has a wet type, disc clutch. Helical type reduction gear is optional. Gearing is straddle-mounted on ball bearings.

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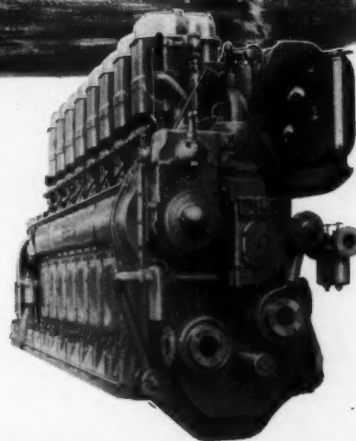
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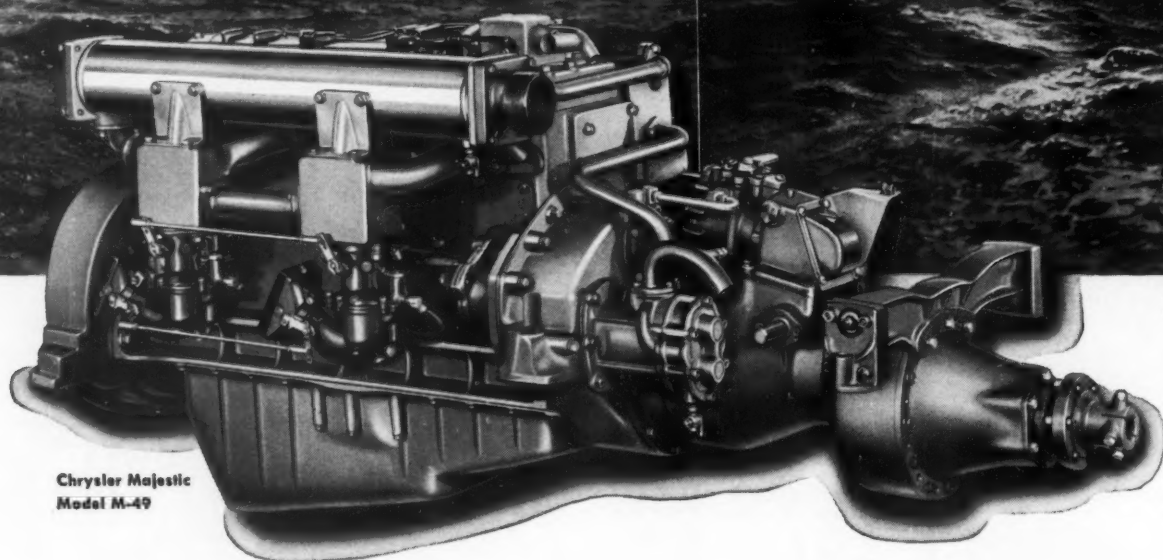


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New National Fisheries Institute officers. From left to right: Stanley W. Letson of Portland, Me., secretary; Irving Usen of Boston, chairman of the board of directors; Royal Toner of New York, president; and George H. Thomas of Cincinnati, treasurer.

Price and Material Controls, Imports, Marketing Discussed at National Fisheries Convention

Royal Toner Elected Head of Institute at Boston Meeting

THE future of the fishing business is boundless." This was the statement made by Royal Toner after he was elected president of the National Fisheries Institute, which held its sixth annual convention at the Hotel Statler, Boston, April 9-11. Mr. Toner, president of Lester & Toner, New York oyster firm, has been in the seafood business 41 years.

Mr. Toner continued: "Yesterday the papers published the story that one spot in the Pacific has been found that would provide enough protein food to feed the world. There are doubtless other parts of our oceans just as generously endowed with fish and shellfish, and fishing them is the only way to provide our ever-increasing population with enough food."

Other officers elected include: secretary, Stanley W. Letson, Maine Fish Meal Co., Portland, Me.; treasurer, George H. Thomas, George H. Thomas, Inc., Cincinnati; chairman of the board, Irving Usen of O'Donnell-Usen Fisheries Corp., Boston, retiring president of the Institute. Charles E. Jackson is general manager of the association.

The new vice-presidents are: Region 1, F. M. Bundy, Gorton-Pew Fisheries, Ltd., Gloucester, Mass.; Region 2, Frank W. Wilkisson, F. W. Wilkisson, Inc., New York; Region 3, A. J. Wegmann, Bagille's Seafood Co., New Orleans, La.; Region 4, J. W. Willis, Marine Products Co., San Diego; Region 5, Henry Goodrich, New England Fish Co., Astoria, Ore.; Region 6, Charles Salasnek, Salasnek Fisheries, Inc., Detroit, Mich.

Approximately 800 members of the fishery and allied industries from all parts of the United States, Canada, Alaska, Mexico, Great Britain, Norway, Iceland, Denmark, The Netherlands, and South Africa were registered at the convention. The 1952 convention will be held in Los Angeles.

Limit on Imports Recommended by Fulham

A panel discussion on the controversial question of fishery imports produced a spirited debate between pro-

ponents of import restrictions and spokesmen for free trade in the fields of groundfish fillets, tuna and shrimp.

Recommending 43 million lbs. as a basic yearly figure for the imports of groundfish fillets, John A. Fulham, Fulham & Herbert, Boston, traced the history of the foreign competition which is now threatening the U. S. fishing industry.

"In 1941 Lend-Lease and other gifts to Canada, Newfoundland and Iceland to expand their fisheries to meet the wartime needs for increased food production, plus the help given by their own governments, developed a gigantic industry in these three countries. In that year they exported a total of almost 135 million lbs. to the United States and Great Britain, of which 91 million went to Great Britain and 43 million to the United States. But Great Britain's decision to take no more imports of fish from Iceland in 1946 and to restrict drastically those from the other two countries presented an ominous threat to the U. S. fishing industry."

Mr. Fulham disclosed that from a prewar export of 9 million lbs. of groundfish fillets from Canada, Newfoundland and Iceland, these competitive fisheries have grown until 1950's figures showed a total of 66 million lbs., or a 37 percent increase over 1949. He said that in addition, imports from European countries have increased with the result that foreign fisheries are now fearing the competition of each other rather than the competition of U. S. fisheries in their own country.

Morrow Presents Opposing View

Opposing Mr. Fulham's side of the question was Clarence Morrow, fillet producer from Nova Scotia, who proposed the American industry, rather than seek to reduce imports, join forces with Canadian producers in seeking to expand the U. S. market.

"I think it is wrong to even think of imposing restrictions," he asserted. "Our minds and energies should be on expansion, quality production and reduction of distribution costs."

(Continued on next page)



J. L. Alphen of Boston, chairman of the convention, and member of the industry to whom the Fisheries Yearbook was dedicated.

Mr. Morrow based his defense of unrestricted imports on the general principle of free trade and on the beneficial effect of fishery imports on the U. S. economy.

"International trade is necessary if we are to have peace and prosperity," the Canadian declared. "Remember too, that trade is a two-way proposition; if we in Canada did not buy \$2,000,000,000 worth of goods a year from the U. S., the effect on your economy would be severe."

Mr. Morrow urged the NFI to appoint a promotion committee to work with a similar committee already in existence in Canada on a joint annual budget of not less than \$1,000,000 a year.

"We have made great progress in this direction in the last few years," he said, "and we must continue the campaign to convince people inland that they can buy just as good fish as people living on the coast."

Historical Background Given by Dr. Chapman

The historical aspect of the import problem was presented by Dr. W. M. Chapman, fisheries assistant to the Undersecretary of State, who served as moderator of the panel discussion on imports.

"Throughout our history," Dr. Chapman explained, "there has been a continual, pendulum-like swing between free trade and tariff protection. The swing continues in one direction until it affects enough people adversely to bring about a change in national policy."

He admitted that fish producers are first to feel the effects of free trade because the resource on which their industry is based is common to all nations. "At the same time," he pointed out, "the fishing industry is such a small part of the national economy that its influence in Washington is relatively small."

The extreme policy of free trade prevailing at present is attributed by Dr. Chapman to the fact that the U. S. was practically the only nation in the world whose economy was not wrecked during World War II.

"It became our job to help repair their economies by lowering our tariff barriers and giving direct assistance," he explained. "Foreign fisheries, one of the easiest industries to convert into a dollar-earner, have bounced back more quickly than other segments of the national economies and their resurgence has brought serious problems to the U. S. fishing industry."

Tuna experts on the imports panel were Wade Ambrose of San Diego, Calif., who presented the viewpoint of domestic canners, and William Herrington of Hamden, Conn., recently returned from three years as chief fishery officer of the United States occupation forces in Japan, largest foreign producer of canned tuna. Spokesmen for domestic and foreign shrimp interests, respectively, were Virgil Versaggi of Brownsville, Texas, and Jack Willis of San Diego, importer of Mexican shrimp.

Seek Decontrol of Frozen Fish

A resolution was passed by the convention asking that the Office of Price Stabilization remove all species of frozen fish and shellfish from price control, except those used predominantly for canning, and that the economic situation of the frozen fish and shellfish industry be made known to OPS.

It was recommended further that, should it become necessary to fix ceilings on leading species at a later date by reason of inflation, then such ceilings should commence at the boat level and extend through every stage of dis-

tribution, including the retail stage. It was stated that any price regulations which may be written take into consideration seasonal fluctuations and elements beyond the control of man and that they should be drafted only after the advice and counsel of the industry affected.

Other resolutions urged Congress to provide adequate appropriations to enable the Defense Fisheries Administration and the Inter-American Tropical Tuna Commission to carry out the purposes for which they were established.

OPS Controls Attacked by Usen

Price controls received further attention when Irving Usen, retiring president of the Institute, declared at a luncheon session that many of the same errors of price controls of OPA in World War II are being repeated currently in OPS.

"Today, once again, the fishing industry is confronted with price ceilings with all their evils," said Mr. Usen. "The first OPS order, written without consulting the fishing industry, provided ceiling prices on processed fisheries products but left fresh fish and shellfish free of control. Many in our industry have urged that controls either be placed on all phases of the industry or that there be no controls at all. We also have urged OPS that ceilings should be removed from processed fish and shellfish, pending such time as dollar and cent regulations could be written across the board."

"Only limited relief is in sight. However, our Institute hopes to solve some of these trying and complex problems of our industry. We do not ask special favors for the fisheries industry; we do ask that we be allowed to operate with the least possible incumbrance so that we may produce the most with the facilities at hand and thus stand behind our Government in meeting whatever situation may develop."

Panel Discussion on Government Controls

Speaking at a panel discussion on "Government Controls Under the Defense Production Act of 1950," William C. Eardley, fisheries consultant to the Office of Price Stabilization, told members of the industry he had been working since January to have ceilings removed from frozen fish and to prevent imposition of a ceiling on fresh fish, but held out little hope that fisheries products would escape price control.

Maurice Rattray, deputy administrator of the Defense Fisheries Administration, Washington, D. C., revealed that maintenance, repair and operation requirements of existing fisheries production and distribution facilities are to be given a priority rating equal to that of military agencies.

"The theory behind current orders of our division," said Rattray, "is that existing production and distribution facilities are the basis of our economy and that it requires less material to keep them in operation than to build new ones. Without the continued operation of most of these facilities, business would soon cease."

Rattray said that there is no prohibition against undertaking new fisheries plant or vessel construction but that under existing conditions, such might prove unwise, and urged careful consultation with materials suppliers before undertaking new construction.

"If necessary, a controlled materials plan can be re-established as in the last war," added Rattray. "In preparation for this eventuality, our Branch of Material Facilities has been working with NPA (National Production Admin-



Governor Frederick G. Payne of Maine, one of the convention speakers.

istration) for the past two months preparing estimates of the materials required by the fishing industry. It should be emphasized, however, that there has been no official announcement that this plan will be placed in effect nor has it been decided whether it will cover all industries if it is placed in effect. The government has no disposition to place in effect unnecessary controls."

Rattray reported that there are indications that shortages of construction materials are not as severe as originally anticipated.

The Labor Situation

"Although we believe the national labor supply is sufficient to meet requirements for the immediate future, there are unmistakable signs of the tightening in the labor market during the coming year," said Arthur Motley, assistant director, Bureau of Employment Security, U. S. Department of Labor.

Mr. Motley reported that the President has stated that before the end of 1951 as many as 4 million additional civilian workers may be needed in the direct or indirect production of munitions and other supplies for the armed forces and in related defense activities. He pointed out that this prospective need of 4 million workers, together with the scheduled withdrawals of young men from civilian life into the armed forces comes at a time when our labor force is already practically fully employed.

Others appearing on the panel were F. J. Orner, consultant with the Railway Transport Division of the Defense Transport Administration; and Robert Walsh of the Department of Agriculture's Fats and Oils Division.

The Packaging Panel

Studies on the marketing of frozen fish in packages reveal that housewives often are confused in making seafood purchases because they are not familiar with the various kinds of fish being put in these packages, according to Walter Fitzgibbon of the Kroger Co., Cincinnati, who took part in a panel discussion on packaging.

Mr. Fitzgibbon illustrated with slides the steps which the Kroger Co. has taken to improve its complete line of consumer packages. Many feet of colored film were used to study the consumer's buying habits and her likes and dislikes. An analysis of these pictures helped to determine the Kroger design of the new packaging for seafoods.

Believing that their research would be helpful to others faced with the problem of packing seafood products, Mr. Fitzgibbon explained the factors that should be brought forcibly to the attention of purchasers. They include: name identification which is a guarantee of quality and freshness; the name of the seafood item in the package through association of color and name of product for easy selection; and information concerning the handling and preparation for cooking of the contents of the package.

"It is the consumer who tells the food processor and retailer how she wants to buy what she wants to buy and what she is willing and can afford to pay. Her demands must and will be respected more and more as self-service merchandising methods of food products increase in scope.

"In the seafood business the wrapping of fish fillets in parchment represented the first great improvement in merchandising fish. When self-service became a dominant factor in the merchandising of all kinds of seafoods at a time when the consumer was accustomed to buying other goods in clean, convenient, appealing packages, it was obvious that fish would have to be packed in the same way."

Trademark Important

"A package can retail its full sales effectiveness, in spite of shortages of preferred packaging materials," Jim Nash, package designer, declared.

He said: "A basically good trademark and package design are virtually emergency proof. They can have 'high voltage sell,' triumph over any shortage, and still retain their identity and continue to create sales."

Nash declared that the four characteristics of a food package with "high voltage sell" are: a distinctive trademark, appetite appeal, eye-catcher value, and quality appearance. "Of these, the trademark is paramount, since



National Fisheries Institute vice-presidents, showing from left to right: Frank W. Wilkisson, New York; F. M. Bundy, Gloucester, Mass.; and Henry Goodrich, Astoria, Ore.

it insures ready brand identification. A trademark must have an individual shape all its own, an individual character," Mr. Nash added.

The Homemaker's Viewpoint

Alice Kline, food consultant and home economist, made the following comment: "As a homemaker and consumer, one of the millions of American women who are trying to balance a food budget, I want to tell you people in our great fishing industry that we don't know enough about fish and shellfish.

"Homemakers want to know more about how to serve fish. The old idea that fish has to be fried has been superseded by today's recipes for broiling, planking and baking our frozen fish fillets and steaks. The flesh of all this seafood is so tender that it needs little cooking. There are an infinite number of potential recipes in the offing for America's kitchens, and the homemakers want them."

Edward Leonard, director of Fish Merchandising for Supreme Markets, who represented the independent grocers, told of his concern's successful experience in packaging fresh products.

Exhibit of Packages and Containers

A special feature of the convention was an exhibit of the various types of packages and containers of NFI members. Fifty-one firms displayed hundreds of different packages of all kinds.

(Continued on next page)



John Matthews at the microphone, who started his fishing industry career in 1896, receives award from Old Timers' Club at Fisheries Convention. At his right is Mario LaMotta, secretary of Chesebro, Robbins & Graham, New York; while Charles Triggs, Chicago, who made the presentation, is at his left.

According to Irving Usen, "The expansion during the last year in the packaging of fishery products has proved the most important development in New England's fishing industry."

Last year, the United States and Alaska produced approximately 286 million lbs. of frozen fish and shellfish, much of which is reaching the housewife in packages. The proportion of fishery products put into consumer-sized packages is increasing yearly.

Says Better Merchandising Methods Needed

Speaking at a luncheon session of the NFI convention, Governor Frederick G. Payne of Maine called upon the fishing business to profit from the meat industry and others in applying better packaging and merchandising methods.

He asked: "Why does the comparatively small per capita consumption of seafood products remain nearly constant while other foods double and triple in sales and consumer acceptance throughout the years? There is nothing tastier, more nourishing or healthful than a dish of properly prepared seafood from a raw product that has been properly handled."

"Recently it was my privilege to sign into law, emergency legislation with which the Maine sardine industry is embarking on a development program of history-making magnitude and importance."

"Our cannery came to the Legislature and asked to be taxed at the rate of 25c a case for every case packed. This move was entirely voluntary on the part of the industry and not a single person appeared to oppose the legislation at a public hearing; nor was it opposed on the floor of the House or the Senate."

At the same convention session, Harold S. Luther, advertising manager of the Forty Fathom Division of General Foods Corp., Boston, called upon the seafood industry to enter upon a co-ordinated, forceful and continued campaign of advertising and promotion to enhance the popularity of its products and expand its markets.

Improvements in Quality

The fishing industry is taking the lead in improving standards and quality of its products and will continue to do so without waiting for enforced standards from the Government, according to J. L. Alphen of General Seafoods Corp., Boston.

He said: "Fisheries products are being improved for the consumer probably faster than any other major food product. Standards are being raised and the industry is determined not to wait to have such standards imposed by Government."

"It now seems certain that the fisheries industry will be able to meet any shortage which may develop with high protein foods, including meat, during the current emergency period. The industry has had one of its best years, both in quantity of production and in consumer sales. Americans have discovered fisheries products and are eating fish and seafoods at a greater rate today than at any time in history."

Alphen, a past president of the National Fisheries Institute, warned however, that aggressive selling is essen-



Left to right: Fisheries Institute director Jerome W. Kiselik, New York; vice president A. J. Wegmann, New Orleans; director John Del Torchio, Gloucester, Mass.

tial to the success of the industry during the months ahead and that the industry should not rely upon conditions inherent in the emergency for moving its product supply which he termed ample for any development.

Experiments on Freezing Fish at Sea

The experiments which the Boston Fish & Wildlife Service laboratory plans to carry out regarding freezing of fish at sea were described by Joseph F. Puncoschar, chief, North Atlantic Technological Research, Fish & Wildlife Service, East Boston, Mass.

He declared: "As a result of the widespread interest industry has shown in this project, the laboratory at Boston was able to expand its facilities so that commercial scale experiments could be carried out to further test the feasibility of freezing round fish on vessels for later processing ashore. Practical as well as economic aspects of this method of preserving and processing fish will be carefully considered as the project progresses."

By-Products Valuable to Food Economy

Contributions which fish meals and solubles—by-products of the commercial fishing industry—are making to the nation's food economy were discussed by Wayne Waller, director of the By-Products Division of NFI, who said: "For the past three years we have been using more feed grains than we have been producing. By enriching animal feed rations with fish meals or solubles—one ton of which will conserve 7 to 9 tons of feed grains—the grain supply can be stretched, to the great advantage physically of both animals and poultry. At the same time the feeding period is shortened by several months, another asset in our overall food economy."

Mr. Waller added that when feed supplements are obtained from by-products of the fishing industry rather than from the laborious and expensive production of grains, the cost of the nation's breakfast bacon and eggs is considerably reduced.

Conditioned-feeding tests to determine the amount of vitamin B-12 in fish meal should be sponsored by the fishing industry, according to Dr. H. R. Bird, senior biochemist of the U. S. Department of Agriculture.

Dr. Bird, who is stationed at the Agricultural Research Center, Beltsville, Md., said that heretofore the industry has used the micro-biological assay method exclusively, but he believes that on the basis of the work which he and other scientists throughout the country have done, fish meal contains even more vitamin B-12 than can be determined by the micro-biological method. He stressed that the food industry is interested in buying fish meal for its high quality protein and vitamin B-12, and added that there is more and more evidence that fish meal and fish solubles contain one or more unknown factors that stimulate growth in poultry and hogs.

"The Competitive Situation in the Sale of Fish Meal and Condensed Fish Solubles" was discussed by Ralph C. Holder, by-product technical consultant to NFI; Warren S. Baker, director of research, Chas. M. Cox Co., talked on "The Values the Feed Manufacturer Expects to Receive in Fish Meal"; "Fish Oils in Today's Commerce" was the

(Continued on page 43)



Left to right: Capt. John Santos, Patterson, La.; Capt. John G. Murley, New Bedford, Mass.; August Strauss, New York, National Fisheries Institute directors.

Catch Fluctuations in Chesapeake Bay

Dr. Nelson Marshall* Says Industry Should Adapt Operations
To Shifts in Fish Populations, and Develop Shellfisheries

BASIC to comprehending seafood resources is to recognize and to understand in a general way the fact of fluctuation. Characteristically fishermen are too busy with the harvest to be concerned with the reasons for unusual abundance. Human nature doesn't encourage us to ask too many questions when all goes well. There is no shortage of questioning and bewilderment, however, when we strike a brief or prolonged period of scarcity.

It is here that the fisherman and the scientist tend to part ways in their thinking. The fisherman is inclined to think something is fundamentally wrong. The scientist is not so certain. He knows that pronounced fluctuations in abundance characterize many aquatic populations. The "downs" in numbers are no more surprising than the "ups" and the causes for both are closely related.

The thought of sudden changes from scarcity to abundance and vice versa surprises you if you tend to think of aquatic populations reproducing like stocks of wild game. It is through comparisons of this sort that most people approach the question of quantity in the sea.

Reproduction by aquatic forms is, however, of an altogether different nature. Rather typical or at least suitable as an example is the shad, the female of which is capable of producing about 100,000 eggs. Assume then, for purposes of illustration, that for every adult female and male of a given shad population, 100,000 eggs are spawned and fertilized. If the population in question is to be held down to approximately its original size, about 99,998 out of every one hundred thousand eggs must die at some stage in development prior to adulthood—a 99.998 percent mortality.

Causes of Mortality

Now let us turn to the factors responsible for this high mortality. We know very little about these but they undoubtedly include temperature, silt, currents, food supply, predators and numerous other conditions, all of which must vary at least a little. If the net effect of these mortality factors varies as much as 0.001 percent, the succeeding generation of shad, in terms of the example we are following, will be either doubled or halved, depending on whether the variation is favorable or the reverse. Over-simplified as it may be, an analysis of this

sort makes one more surprised at signs of stability in numbers than by the fact of fluctuation.

To carry through with this illustration, it should be added that the shad is not one of the more prolific spawners of the marine group. Many of our fishes, croaker for example, outdo the shad in egg numbers and the female oyster produces about 60,000,000 eggs. Added to variations in numbers due to reproduction are the wanderings that some of the fishes in question may undertake. Actual numbers may be one thing and presence in a given location or availability to the fishery quite another.

Adaptability Necessary

Can an industry build and prosper on such instability? There seems little doubt but that it can build best if it does so with full recognition of the fact of fluctuation. Two points come to mind immediately in this connection:

First, the fishery should have the ability to shift from one emphasis to another in response to the shifts in fish populations.

Second, the investment in equipment, etc., should be in line with the average rather than the peaks of abundance.

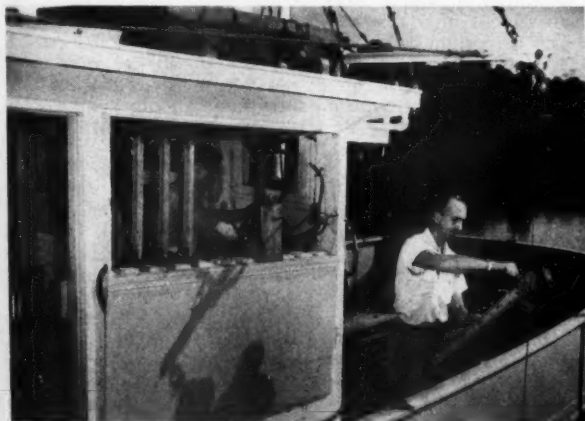
Such adjustments, suited as they are to fluctuations in aquatic populations, are not altogether compatible with the attainments in efficiency and the expansion of facilities that one associates with prosperity, competition and growth in healthy industries.

However, consciously or otherwise numerous adaptability factors have developed in the industry. One of the simplest is the combination farmer-fisherman way of life so common in the Tidewater area of Virginia. In this the participant combines his farming effort with fishing activities, shifting his work as the seasons of the year dictate and varying his efforts according to his immediate success on the land or in the sea.

Another step toward adaptability is the increased use of the trawl and its ever-growing domination over the pound net fishery, which suffers some of the ills of specialization. Though our laws do not permit the use of the trawl within the Chesapeake Bay and its tributaries, it can operate widely up and down the coast outside the Bay and it can catch quite efficiently several different species. Thus, if a certain location offers an abundance of

(Continued on page 36)

* Former director, Virginia Fisheries Laboratory, Gloucester, Va.



Technicians aboard the 65' steel research vessel "Maury" readying equipment that will be used to study marine specimens taken from the floor of the Chesapeake Bay. The vessel is owned by Johns Hopkins University, and the studies are carried on by University scientists to help develop better management plans for crabbers, oystermen and fin fishermen. The "Maury" is powered with a 6-cylinder General Motors Diesel which moves her along at 11 knots.

Use of Echo Sounders by Fishing Boats

Ewing Lawrence, Jr.* Explains Their Operation,
Tells How They Can be Used to Best Advantage

ONE of the most outstanding advances made in the fishing industry since early times has been the introduction and use of echo-sounding gear. This equipment has given the commercial fisherman new eyes—eyes that see through water, clear or cloudy, to depths once thought unfathomable. "Underwater Radar," "Electronic Fish Finder," "Underwater Road Map," are only a few of the familiar nicknames given to this equipment by fishermen.

For a thorough understanding of the importance of this revolutionary gear, it is necessary first to understand the principles of echo sounding as now employed.

Echo sounding—the name is ultimately descriptive—is literally the function of measuring the depth of water by means of echoes bounced off the bottom and timed in their passage. The equipment to accomplish this function could be, and once was, simply an audible sound-making device, a stop watch or other timing mechanism, and a sound amplifier for reception of the echo.

Actually, the sound employed for this purpose may be of any frequency within the audible or superaudible range. Years of research and practice, however, have shown that frequencies of from 20 to 50 thousand cycles per second are best suited for this purpose. Fortunately, sound frequencies anywhere within the sonic and ultrasonic range have the characteristic of traveling at essentially the same speed in the same medium and of being affected but little by changes in the degree of salinity or temperature of the water.

Echo Sounders Generally Single Unit

Present-day mechanisms for producing the sound, timing the passage, and receiving and indicating the echo are generally combined into a single-unit system. The timing, which is the heart of the mechanism, is accomplished by means of a constant speed motor drive which carries the transmitter keying contact and some means for producing an indication of the echo, and relating the time of reception to the time of transmission along a graduated scale.

An indicating echo sounder commonly employs a revolving disc to which is attached an electric lamp. At the zero position of the disc, the transmitter is energized and the sound is emitted from the underwater soundhead or oscillator mounted in the hull. When the echo is received and amplified, it causes a flash in the electric lamp which has meanwhile been rotated to an angular position corresponding to the elapsed time. The indicator is so constructed that the flash of light from the lamp is immediately comparable to a graduated scale marked in units of depth so that a direct reading of depth is obtained.

To obtain maximum benefit and utility from such an indicator it would be necessary to observe the flashes continuously and to record the data thus obtained in the form of a graph. This would require two operators, one to observe and one to record. For this reason the depth indicator has limited application except for purely navigational purposes, as a single operator finds it impossible to observe the indications continuously and to visualize the true contour or other characteristics of the surfaces from which echoes are received.

Recording Echo Sounders

A recording echo sounder employs the same basic principles as the indicator, but produces its data as a permanent (or in some machines semi-permanent) mark on a graduated chart, thus doing automatically and in-

stantaneously the complete job which might be done by an indicator and two highly efficient operators. The recorder completes the job only started by the indicator, and produces a complete picture, in profile, of the bottom contour or of the size, shape, and density of reflective matter between the surface and the bottom.

The direct-reading echo sounder manufactured by one West Coast company produces its record on dry, graduated paper by means of a moving wire stylus through which the amplified echo is passed to remove, electrically, the light gray coating from the surface of the record paper so that the black of the graphite-bearing paper bulk shows through. (However, devices manufactured by other companies use inking pens or wet paper.) The recording and direct-reading echo sounder under discussion produces a very detailed record as the amount of surface coating removed is dependent upon the strength of the echo which, at a given depth, is dependent upon the hardness and compactness of the bottom or other reflective surfaces.

Sonic energy has the ability to penetrate most matter to a greater or lesser extent, and echoes are obtained from the depth of the penetration, descending in strength with the depth of penetration. Thus, by the darkness of the initial echo indication and by the fine degrees of shading resulting from the penetrating energies, the record produced gives an accurate indication of the hardness or compactness of the bottom. It is, therefore, possible to distinguish readily between rock, sand, and mud. With some experience and familiarity with the minute peculiarities of a particular machine, it is possible to go further and determine the approximate consistency of mixed bottoms or to detect small patches of harder material embedded in soft mud or sand, etc.

Use as a Navigational Aid

As a navigational aid, the depth recorder is extremely valuable. By following the contour of the bottom, grounding and stranding always may be avoided, and pinpoint positioning may be obtained by comparing the record graph with navigational charts. Thus, a depth recorder may be considered a necessity for navigating shoal waters, particularly in uncharted areas or areas unfamiliar to the boat's navigator.

The bottom contour is shown in great detail—the presentation of bottom irregularities being most faithful and dependent only on the number of soundings per lineal unit of bottom covered and the scale range of the device. For the utmost in accuracy, the depth recorder used should take the maximum possible number of soundings per lineal unit of bottom covered and should have a scale range not exceeding the maximum depth of interest, so as to obtain greatest enlargement of contour.

Reference to soundings per lineal unit may be misleading as this will actually depend only upon the lineal speed of the boat. The rate of sounding is limited by the scale range as sufficient time must be allowed between the soundings for passage of sound from the soundhead to the bottom and return, and for recovery of the electronic circuits.

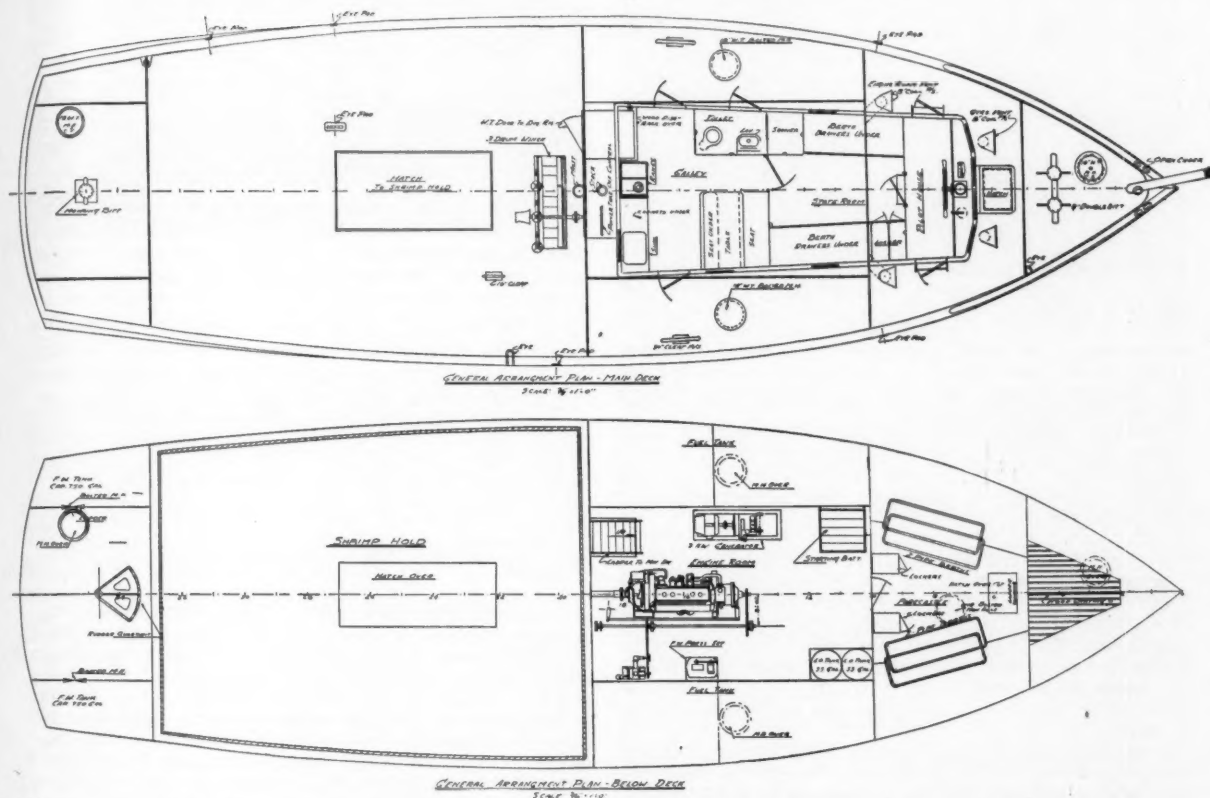
Assuming a nominal velocity of 4,800 feet per second, it may be seen that for a depth range of 400 fathoms, soundings cannot be taken more often than one per second, as it would take approximately one second for the sound to travel to the bottom and return. Actually, the recovery time of electronic circuits, the necessity for avoiding any possibility of overlap, and certain mechanical considerations dictate that soundings be taken at from $\frac{1}{4}$ to $\frac{1}{2}$ of this maximum rate.

(Continued on page 38)

* Co-owner, Electronics Distributors, Jacksonville, Fla. This article is an abstract of a paper presented by Mr. Lawrence at the recent Gulf and Caribbean Fisheries Institute held at Miami Beach, Fla.

Three New 75' Steel Shrimpers for Texas

Built at Port Arthur for Capt. Carl Muchowich & Sons



Main deck and below deck arrangement plans of shrimp trawlers designed and built by Gulfport Shipbuilding Corp.

THREE new 75' identical steel shrimp trawlers were delivered recently to Capt. Carl Muchowich & Sons of Freeport, Texas by Gulfport Shipbuilding Corp., Port Arthur, Texas. They are the *Captain Carl*, skippered by Capt. Mutt Thompson; the *Carl M. II*, Capt. Dudley Young, and the *Miss Freeport*, Capt. Bob Thompson.

Designed by their builders, the vessels have a beam of 22' and draft of 8'. Plating is $\frac{3}{8}$ " thick from the keel to the chine, $\frac{5}{16}$ " from chine to deck and on deck, $\frac{1}{4}$ " for bulkheads and $\frac{3}{16}$ " on the deck house. Framing is $3 \times 2 \times \frac{1}{4}$ " angles on 24" centers, and there is a $6 \times 4 \times \frac{1}{2}$ " angle stringer full length on either side.

Propulsion power is supplied by a "6-110" General Motors Diesel with 4.5:1 reduction gear and power take-off, rated 240 hp. at 1600 rpm. or 175 continuous shaft horsepower at 1450 rpm, which gives the trawlers a speed of 12 mph. Starting batteries are 32-volt, 16-cell Willards with a 260 ampere hour, 72 hr. rating.

Furnished by Stewart & Stevenson Services, the engine is equipped with Columbian Magicam clutch and throttle controls. It swings a 54×40 , 3 blade, Columbian propeller and the Tobin bronze tail shaft is $3\frac{1}{2}$ " in diameter and 18' long, fitted with 2 Goodrich Cutless rubber stern bearings. The $3\frac{1}{2}$ " intermediate steel shaft is 13'7" in length. The bronze-bushed steel upper rudder stock is $3" \times 4'11\frac{1}{4}"$ and the lower stock is $3\frac{1}{2}" \times 5'3\frac{1}{4}"$.

There is a 3 kw. Diesel generating unit driven by a 5 hp., 1500 rpm. Petter engine, and fitted with a Marine Products raw water pump. The bilge pump has a capacity of 90 gpm. The fresh-water pressure system employs a motor-driven Deming pump and a 12 gal. pressure tank.

Pilot house equipment includes Bendix depth recorder,

200-watt Apelco radiotelephone, John E. Hand & Sons compass and automatic pilot type steering. Two floodlights and a Portable Light Co. One-Mile-Ray searchlight are provided.

The deckhouse contains a large stateroom aft of the raised wheel house with berth on either side and a double locker. On the port side is a room containing toilet, lavatory and shower, entered from the deck. In the after end is the messroom and galley, with doors to the deck on each side, as well as one to the stateroom. Equipment includes a Shipmate #1100 oil-burning galley range.

Four pipe berths are provided in the fo'c's'le which is entered from the engine room and has a ladder to an

(Continued on page 32)



"Carl M. II", one of the three new Muchowich shrimpers.

Maine Boat Yards Active With Fishing Boat Work

An increase in activity is evident among Maine boat yards, several of which are busy with fishing boat construction, converting and repairing.

Newbert and Wallace of Thomaston, have started construction work on an 83' dragger for Capt. Henry W. Klimm, Jr. of Woods Hole, Mass. She will be powered with a 330 hp. General Motors Diesel Twin unit, driving a single shaft through 4:1 reduction.

Bristol Yacht Building Co., So. Bristol, is building a 73' dragger for Edwin B. Athearn of Falmouth, Mass., from designs by M. Rosenblatt & Son of New York City. The vessel will be powered with a 180 hp. Burmeister & Wain Diesel.

Goudy & Stevens of East Boothbay are converting the former 97' menhaden vessel *Margaret M.* to a dragger, for her new owner, Blue Sea Fisheries, Inc. of which Capt. Walter E. Beateay, Concord, Mass. is president. An ex-minesweeper, the vessel previously was owned by Harry G. Mogck of Cape May, N. J., and is powered with a 400 hp. Superior Diesel. She is to be renamed the *Polaris* and will fish out of Portland.

Hodgdon Brothers of East Boothbay are building a 27' lobster boat for E. Davis of Exeter, N. H. which will be powered with a Chrysler Ace engine, and a 34' fishing boat for G. Fiefield of Fall River, Mass. which will have a Chrysler Crown.

New Lobster Boat for Matinicus

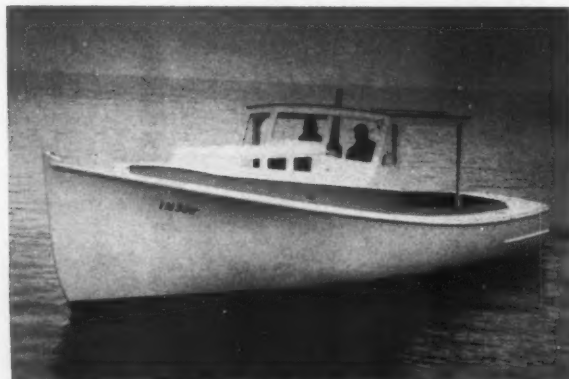
A new 32' lobster boat, the *Ada E.* was launched April 6 by Rockland Boat Shop for Capt. Frank Thompson of Matinicus. She is equipped with a 95 hp. Chris-Craft engine with 2.41:1 reduction gear, which turns a 20 x 15 Columbian propeller, giving the boat a speed of 12 knots. Her beam is 9'6", and the cabin is fitted with a Shipmate range. She is framed with native oak and planked with 1" cedar.

Rockland Boat Shop is building a 36' lobster boat for Capt. Ferdinand Day of Monhegan, which will be powered with a 135 hp. Nordberg engine with 2.5:1 reduction gear.

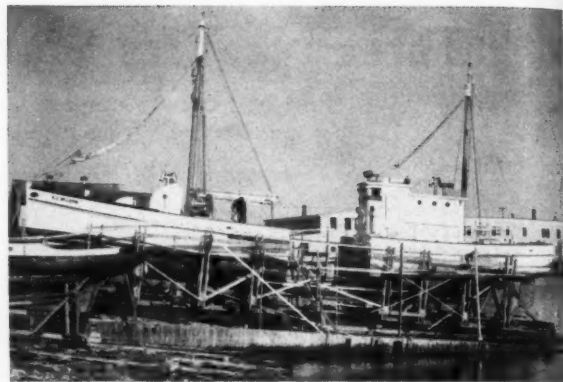
"A. C. McLoon" Is Lengthened

The lobster smack *A. C. McLoon*, owned by H. G. McLoon Co. of Rockland, Maine, is back in service after being lengthened 11½ feet. Formerly 65' long, the vessel was sawed in two forward of the deckhouse where a new amidship section was constructed. The work was done by Lash Bros. at the Perry Marine Railway in Rockland.

After the vessel was cut apart, the forward section was moved ahead on the railway and raised to provide proper fairing-in with the after end. The original keel was taken out back to the splices and the planking was



New 32' lobster boat "Ada E." built by Rockland Boat Shop, Rockland, Me. for Capt. Frank Thompson of Matinicus, Me. Powered with a 95 hp. Chris-Craft engine.



Rockland, Me. lobster smack "A. C. McLoon" after being cut in half, previous to being lengthened 11½ feet.

taken off as much as 15' back of the cut in order to stagger the butts of the new section. New sister keelsons, 6 x 7", were bolted to the keel and two bilge stringers, two clamps and an additional shelf were installed.

The additional length has enlarged the hold carrying space from 22,000 to 40,000 lbs., and makes the vessel one of the largest smacks on the coast. Capt. Sidney Sprague reports that the lengthening has increased the speed of his vessel by three-quarters knot. The *McLoon* is equipped with a 175 hp. Fairbanks, Morse Diesel with 2:1 reduction gear, New England hoist, Kaar direction finder, 150 lb. Danforth anchor and Shipmate range.

Sardine Industry Anticipates Good Year

Maine sardine packers, seiners and weirmen have voiced the opinion that this may be one of their greatest years in history provided the herring cooperate by coming to Maine shores in great numbers as they did last season.

This optimism is based largely on the results expected from the industry's new promotional campaign. This year the 40 packers in Maine have banded together to merchandise and advertise their product through voluntary taxation. A 25-cent tax on each case packed this season will produce a fund of between a half-million to a million dollars. This cooperative effort on the part of the packers will help stabilize the price of the Maine product by building a sustained demand.

The first fish taken at an Eastport sardine plant were received at the Paispearl Products, Inc. on April 25 when two hogsheds of herring were processed. The Paispearl plant packs sardines in glass.

Sardine Carriers Overhauled

Three North Lubec Manufacturing and Canning Co. sardine carriers, the *Irma*, *Pauline* and *Double Eagle* have been overhauled by Hunter Machine Co., Rockland. A new 5" Fairbanks-Morse fish pump was installed on the *Irma*.

To Carry On Tuna Catching Experiments

The *Western Explorer*, which was used by Capt. Harvey Petrich experimental Western-type tuna seining out of Gloucester 13 years ago, has been chartered to the Fish & Wildlife Service to carry on commercial tuna catching experiments this Summer in Maine waters.

The *Explorer* will base at Boothbay Harbor, and the shore operations of the research will be in charge of John Murray.

Want Crayfish, Tails Properly Designated

Another effort to protect genuine Maine lobster from competition with crayfish and South African "tails" was to be made early this month at a meeting of the Maine and Massachusetts Congressional delegations with Government officials and the industry.

The conferees were going to try to arrive at a scientific and legal definition of lobster which will prevent imitations from being labeled lobster.

To date, the Government has taken the position that if an adjective like "spiny" or "rock" is used with lobster, it is not deceptive mislabeling, within the law.

Mexican-Bound Dragers Stop at Rockland

Six of a fleet of eleven 58-ft. draggers built in Meteghan, N. S. for Congeladora de Mazatlan, of Mazatlan, Sinaloa, on the Pacific coast of Mexico, were in Rockland last month for an overnight stopover on the start of their 4,000 mile run. The trip is expected to take 30 days. Power in each boat is an Atlas Imperial 85-100 hp. Diesel.

The Mexican firm owning the fleet was recently formed to establish a huge shrimp fishery at Mazatlan. The plant has a capitalization of 5,000,000 pesos and will pack and freeze Mexican shrimp for distribution in the United States.

Trawler "Breaker" Breaks Record

Closing out a Winter fishing season for the port of Rockland, which has seen the record high for payoffs to crews topped several times, the trawler *Breaker* broke the record early last month. The General Seafoods-owned craft under Capt. Percy Spurling landed 212,000 pounds, which brought \$10,987.

Sardine Carrier Launched at Friendship

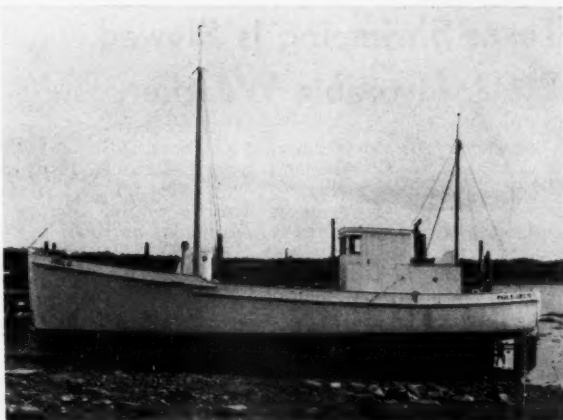
Launched at Friendship on April 10 was the 54-foot sardine carrier *Paul S.* built by Lash Bros. for Sherman Denbow of Denbow Fisheries, Lubec, Maine. With a beam of 15' and draft of 5'6" the vessel was constructed from a new model by the boat yard. She is of double ender design, which insures maximum maneuverability around weirs.

Power is supplied by a 4-cylinder, 80-120 hp. P&H Diesel sold by Atlantic Equipment Co. The engine is fitted with a 2:1 Snow-Nabstedt reduction gear and swings a 36 x 22 Columbian propeller on a 2½" Columbian Bronze shaft, giving a speed of 9 mph. The boat is fitted with 2 bunks in the fo'c's'le and one in the pilot house, and is equipped with Shipmate range, 24-volt Exide batteries and Columbian steering gear. She has two 175-gallon fuel tanks and can carry 45 hogsheads of herring.

The vessel has a 7" oak keel, 2 x 3 bent oak timbers on 9" centers, 1½" pine planking and 1¾" pine decking.

"Alice M. Doughty II" Repowered

The 85' dragger *Alice M. Doughty II*, operated by The Harris Co., Portland, has been repowered with a new



New 54' sardine carrier "Paul S." for Denbow Fisheries, Lubec, Me. Built by Lash Brothers, Friendship, Me., and powered with an 80-120 hp. P&H Diesel.

240 hp., 900 rpm., Model 2505 Buda Diesel at the Sample Shipyard in Boothbay Harbor. The engine is equipped with a #2075 Snow-Nabstedt 2:1 reduction gear, and #3774 Snow-Nabstedt reverse gear fitted with an air ram for pilot house operation using Westinghouse Tridyne controls. Turning a 50 x 34 Federal propeller, the engine is expected to give the vessel a speed of over 10 knots. A keel pipe cooling system, with 102' of 1½" brass piping, has been installed.

Other equipment aboard the boat includes a new Shipmate range, a Jabsco bilge pump operated off the main engine, RCA 30-watt telephone, DR-7 Bendix depth recorder, one-cylinder Buda Diesel auxiliary generating set and Hathaway winch.

Capt. Manuel Silva is skipper of the *Doughty*, while Clarence Hanson is engineer.

Two Additions to Portland Fleet

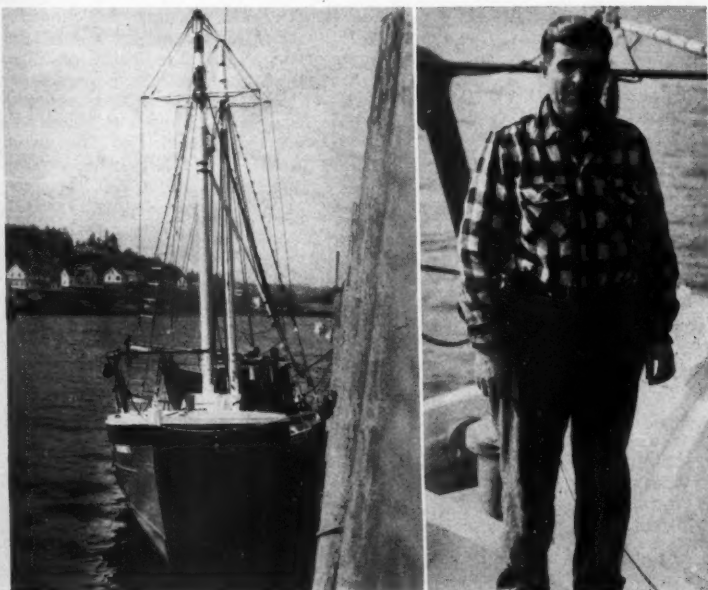
The trawler *Brookline* is now operating out of Portland under command of Capt. Walter Train. She is landing fish at Maine Fisheries Corp. where she brought in a trip of 184,000 lbs. on April 10.

The 107' dragger *Courier*, formerly owned by Roland Styron of Oriental, N. C., has been purchased by Mid-Central Fish Co. and Lawrence Scola of Portland, and renamed the *Florence and Lucy II*. Skipped by Capt. Joseph Orlando, she weighed out 202,000 lbs. of fish on April 3 and a 185,000 lb. trip on the 19th.

The Portland steel dragger *Silver Bay*, skippered by Capt. William Olsen, has received a Spring overhauling at Story Marine Railway, So. Portland. She was painted with Pettit Paints, and equipped with radar.

Leadbetter Managing Knox Marine Exchange

John Bird, who has been manager of Knox Marine Exchange, Inc., Camden, Maine for the past 25 years, has sold his interest to Gilbert H. Leadbetter of Camden. Mr. Leadbetter, in partnership with his father, owns a boat yard and machine shop with wharf space. He will carry on the brokerage business in commercial and pleasure craft which Mr. Bird has developed, with activities extending from Newfoundland to the Caribbean. Also to be continued by the new management will be the sale of new and used engines. An added feature offered is the servicing of boats and engines.



Portland, Me. dragger "Alice M. Doughty II", which has been repowered with a 240 hp. Buda Diesel at Sample Shipyard, Boothbay Harbor; and her skipper, Capt. Manuel Silva.

Texas Shrimping Is Slowed By Unfavorable Weather

Bay and tidewater shrimping has been slow since the bays opened to commercial trawlers March 1. Many of the bay boats have not made a run since the first of the year. They are at the docks, freshly painted and with equipment overhauled, ready to put out as soon as the run of white shrimp shows up.

Usually bay shrimping is good during March and April when weather is favorable, but this year both unfavorable weather and scarcity of shrimp have halted operations. Those boats which have attempted shrimping have returned to port with no catches to sell.

Offshore Gulf shrimping in from 14 to 20 fathoms has been good for from 500 to 1000 pounds of reds a night when it has been possible to work the gear in heavy seas.

Landings of "brownies" and "pinks" from the far off Campeche Banks continue to be good. Approximately 15,000 barrels were handled at Port Isabel and Brownsville on the south and some 3500 barrels were landed at Aransas Pass.

With bait catches small due to the scarcity of bay shrimp, many Corpus Christi commercial pole and line fishermen have turned to rod and reel and artificial bait. Some report satisfactory catches of trout and reds.

The first mackerel run of the season appeared off Port Aransas early in April.

To Study Oyster Mortality

The research foundation of the Texas A. and M. College has begun a study of oyster mortality in the coastal waters of Louisiana and Texas. The study will be one of the most extensive ever undertaken in marine biology and the largest such project dealing with oysters.

Shrimp Catch Shows Gain

Landings of fishery products at Texas ports during March amounted to 3,209,900 lbs. compared with 1,771,300 lbs. for the same month in 1950. Receipts of shrimp (3,006,700 lbs.) were 1,514,200 lbs. or 101 percent above the figure for the same month in 1950. The shrimp catch accounted for 94 percent of the total Texas landings for March, 1951.

Landings of finfish for March, 1951, totaled 181,100 lbs.; a decrease of 87,400 lbs. compared with March, 1950. Receipts of finfish for the present fiscal period totaled 5,099,500 lbs. compared with 9,695,000 lbs. during the first seven months of the last fiscal year. Smaller catches of menhaden during the early months of the present fiscal period were the main reason for the lowered finfish total.

New Docks to Accommodate Fishing Boats

Harlingen's inland barge harbor and docks have been completed, according to the Arroyo Colorado Navigation District trustees, and the dredges *Mansfield* and *Holland* have practically completed digging the channel from the Intracoastal canal up to the Arroyo Colorado to the harbor.

Provisions are being made to furnish facilities for a part of the South Texas fishing fleet. Several seafood companies already have built plants along the Rio Hondo for service to shrimp trawlers and for handling and processing shrimp and fish. The total cost of the docking improvements, dredging and other improvements will exceed \$3,000,000.

Port Brownsville is continuing the expansion of its port facilities, and has just completed a new shrimper dock of concrete and timber construction for the exclusive use of shrimp trawlers. This dock extends shrimper facilities in the port city by almost 1,000 feet.

New Distributor of Surrette Batteries

Owl Battery Co. of Corpus Christi, has been made a distributor of Surrette marine batteries and will maintain complete sales and service facilities.

Gulf Commission Asks for Repeal of Shrimp Laws

Repeal of State laws regulating the size of shrimp caught in inland and outer waters of the Gulf of Mexico has been recommended by the Gulf States Marine Fisheries Commission. Bert E. Thomas of Mobile, chairman of the commission, announced in Pensacola that this was one of several recommendations to be made to conservation departments and legislatures of the five states affected. Thomas said the recommendations were based on extensive biological studies made during the past several years.

Commercial fishermen and other opponents of the laws contend it is impossible for them to keep from catching undersized shrimp in their trawls. By the time the small shrimp can be sorted out, they said, they are dead.

Uniform shrimping seasons in all inside waters in the area east of the Louisiana-Texas border to and including St. Marks, Fla. also was recommended by the commission.

The initial closed season would be from June 15 to Aug. 31, and the second for inside waters of all states from Dec. 15 to March 31. A different closed season was suggested for inside waters of Texas—from July 15 to August 15. Outside waters, the commission said, should remain open to shrimp fishing.

Gulf Shrimp Supply Hits New High

The supply of shrimp in the U. S. last year was record-breaking, according to the Fish & Wildlife Service. Domestic production, mostly in the Gulf and South Atlantic states, was more than 190,000,000 lbs., compared with 175,000,000 lbs. in 1949 and 167,000,000 in 1948. Shrimp imports, mostly from Mexico, increased to a new high of 40,198,000 lbs.

The 1950 shrimp production by states: Mississippi and Louisiana combined, 82,257,000 lbs.; Texas, 42,502,000; Florida, 23,216,000 and Alabama, 16,776,000; North Carolina, 6,636,000; South Carolina, 7,285,000; and Georgia, 6,929,000.

Louisiana Yard Busy with Shrimpers

The new 75 ft. trawler *Shamrock* has been launched by Conrad Industries, Morgan City, for Booth O'Quinn and R. S. Tolson of Brownsville, Texas. Another 75-footer, to be named *Four Leaf Clover*, will be built for Tolson and Glen Davies of Brownsville.

J. R. Hardee, Jr., Morgan City, had a new vessel the *Capt. Shorty* completed at Conrad's recently. She is 70 ft. long and equipped with a 275 hp. General Motors Diesel.

Oscar Landry and Stanley Williams, owner of the 85 ft. *George W., Sr.* have ordered Conrad to convert the crash boat into a shrimper. Also to be converted for shrimping is the 104' aircraft rescue vessel *Sea Hornet*, sold by George Williams to Capt. Clayton Wiggins of Morgan City.

Noble Hardee of Morgan City has an order at Conrad's for a new shrimper the same size as the



Simon Franceski's 43' trawler "Cecile Rose" of Buras, La. She is powered with a 60 hp. Atlas Imperial Diesel.

Capt. Shorty. Also underway at Conrad's is a new 75 ft. trawler for Earl Webster of Texas.

Brady Engine Co., Berwick, has installed a twin unit 330 hp. G. M. engine in a 75 ft. all-steel shrimp trawler owned by W. B. Kornegay of St. Johns Shrimp Co., Patterson.

"Arcturus" to Go Menhaden Fishing

The 108 ft. all-steel boat *Arcturus*, owned by Twenty Grand, Inc. of Morgan City left last month for Port Arthur where it will engage in menhaden fishing. Thomas Roberts is captain and Albert Mahfoux, chief engineer. The craft which carries a crew of 12, will unload at the Port Arthur Menhaden Products plant.

The boat was recently repowered with a 900 hp. GM Cleveland Diesel at Alexander's Shipyard in New Orleans. It was also equipped with electric steering.

Good Shrimp Trip

Capt. Dewey Delaune's shrimp trawler *North Sea* of Morgan City brought in a 66-barrel catch from Campeche the middle of April, making her one of the top producers for the month.

Morgan City Freezer in Demand

The facilities of the Morgan City Freezer and Cold Storage, Inc. are in steady demand. Seafood production from Houma, Morgan City, Berwick and Patterson is being frozen and stored at the local plant. The firm's unloading and packing service is being used by a number of independently owned boats as well as the fleets owned by J. J. Hebert and A. F. Sauls, Jr.

Net Shop Under New Management

George Paul's Net Shop is now operated by Ernest Paul who has taken over the business from his brother George. George has been shrimping since November when he bought the trawler *Miss Constance* from Harry McHugh. Capt. Paul and crew were expected to leave last month for another run to Campeche, having brought back 56 barrels from their initial venture to those shrimp grounds. The trip into Mexican waters takes three days and three nights steady running.

Man Rescued from Burning Boat

Capt. Harry Hanby of Violet, La. was rescued uninjured from his burning fishing boat *Aries* last month about seven miles south of Cat Island in the Gulf of Mexico.

The rescue was made by the charter yacht *Southern Seas* of Gulfport, Capt. John Backe, who made a run at forced speed to the stricken craft. The *Aries* was a newly constructed boat, and was burned to the water line, the hulk being sunk by the Coast Guard.

Alabama Landings Mostly Oysters

Landings of oysters amounted to 7,062,000 lbs. and accounted for 94 percent of the Alabama seafood receipts during March. Total production of fishery products at Alabama ports during March was 7,529,800 lbs., a decrease of 24,000 lbs. compared with the previous month.

Receipts of finfish totaled 336,200 lbs. during March, which was an increase of 105,600 lbs. or 46 percent compared with the previous month. Shrimp production registered a decrease of 172,200 lbs. during March compared with February.

Landings of all species during the three-month period ending with March totaled 18,519,350 lbs.

Shrimp Season Opened

The Alabama commercial shrimping season was opened April 2 in the Mississippi Sound and State Conservation Director Earl McGowan said the state seafood division at Bayou La Batre had recommended the opening date after a survey of shrimping grounds.

Biloxi Boat Goes Aground

Edward Wenerski's 36 ft. shrimp boat *Daniel W.* of Biloxi went aground last month on Ship Island as he was re-



The 43' shrimp trawler "Eagle", owned by Mrs. Agnes V. Steiner of Bayou La Batre, Ala. The vessel has a 55 hp. engine with 2:1 Snow-Nabstedt reduction gear and Hyde propeller.

Boston Cod Production Shows Increase During March

A gain of over 400,000 lbs. was shown in Boston cod landings during March, the yield having totalled 2,968,800 lbs., as compared to 2,559,000 lbs. in the same month of last year. Large fish accounted for more than 60% of the total catch of cod. The price for cod averaged \$8.02 per hundred lbs., over a dollar less than last year.

The total March catch of all species fell from 15,059,500 lbs. last year to 13,379,600 lbs. this year. Average price was \$9.72, about the same as last year.

Landings of redfish jumped from 287,900 lbs. in March, 1950 to 532,700 lbs. this year. In spite of this gain, the price was nearly \$1.50 higher per hundred pounds in March, 1951.

Species which showed a decline included haddock, production of which totalled 8,905,500 lbs., or about 2 million lbs. less than in March, 1950.

The pollock yield amounted to 389,300 lbs., approximately 200,000 lbs. lower than last year. The price was about \$2.00 higher this March.

During the first three months of 1951 fish production at Boston totalled 37,612,600 lbs., or around 1¼ million lbs. more than in the same period of 1950. The average price was \$9.14 during the three-month period of 1951, compared to \$9.81 last year.

Rosen Addresses Electronic Meeting

A talk on the use of communication and electronic navigational equipment on fishing boats was delivered by Lawrence Rosen, marine superintendent of Usen Trawling Co., Boston, before a meeting of the Radio-Television Manufacturers Assoc. at Baltimore last month. He briefly described fishing operations and explained the important role played by electronic equipment. Rosen pointed out, however, that with the increased use of radiotelephones, a serious problem had developed due to the crowding of radio channels, and he urged that study be given to alleviating this situation.

Atlantic Equipment Handling Petter Engines

Atlantic Equipment Co., Inc., 58 McDonald St., Readville 37, Mass., has been appointed New England distributor of Petter Diesels. The engines are made in air cooled and water cooled models, of 1 to 4 cylinders, 3 to 40 hp.

turning from a 12-day fishing trip to Louisiana waters.

High waves washed away a platform, causing trawls to get in the machinery, which prevented Wenerski from getting his boat started.

Florida Spiny Lobster and Mackerel Being Studied

University of Miami scientists are trying to pin down facts on the spiny lobster, an animal that supposedly does little ocean traveling. The study is being conducted by the University's Marine Laboratory and the National Geographic Society.

They have found that the Florida spiny lobster or sea crayfish may travel many hundreds of miles from the place it is spawned to the sea-bottom where it grows to maturity.

Dr. F. G. Walton Smith, director of the laboratory, and Dr. Hilary B. Moore are in charge of the project, which uses the ship *Megalopa* to tow nets at various depths in the Gulf Stream.

Recent experiments indicate that Spanish mackerel has canning possibilities. The Spanish mackerel resource as a whole yields an annual catch of 6,500,000 to 8,000,000 lbs., and almost the entire production is handled in the fresh-fish markets, although small quantities are salted and smoked.

Good Mackerel Run

A mackerel run was under way off Fort Pierce early last month and Fort Pierce fishermen were bringing the fish in by the boatload. One company reported a catch of 38,000 lbs., another 20,000, and there were various other smaller hauls.

A two-day catch totaled some 175,000 lbs., or nearly four normal carloads. Packing houses were a scene of great activity. The fish were being caught a short distance offshore and all available boats were active.

Funds for Sponge, Oyster Cultivation Asked

On April 27 Sen. Henry S. Baynard introduced a bill asking for an appropriation of \$100,000 to help revive the sponge industry by planting and cultivating sponges scientifically.

The oyster cultivation program, which cost \$100,000 during the past two years, is up for renewal by the current Legislature. The program was three-fourths financed by an oyster severance tax and the sale of dead shells.

Another sponge bill introduced by Sen. Baynard would exempt sponge boats from ad valorem and tangible personal property taxes when they are not in operation for six months or more.

The bill states that due to the temporary lack of sponges suitable for taking and sale, there is little use for sponge boats at this time. A number of the sponge boats have been tied up for many months and thus have been of little or no value to their owners.

Fishermen Organize to Do Research

A group of fishermen and fish dealers received court approval April 13 for a charter to organize the Fishermen and Dealers' Association, which will make a scientific study of the fishing industry and conservation in Manatee County.

Ed Mead, Palmetto fisherman, was named president until an election is held. Other officers named in the charter petition are Harry Vandelf, Palmetto, secretary-treasurer; Manly Bel, Cortez, first vice-president; Dan Mora, Ralph Fulford, W. T. Bel, Albert Few, all of Cortez, vice-presidents.

Would Change Closed Season for Shrimp

Changes in the closed season for the taking of shrimp in the Atlantic Ocean were proposed in bills introduced on April 13 in the House and Senate. Under provisions of the measures it would be unlawful to take shrimp between April 30 and May 31. The present closed season is from March 15 to April 15.

"Eleni" Lands Sponge Trip

The boat *Eleni*, Capt. Mike Houllis of Tarpon Springs, returned April 20 from a 32-day trip in Gulf waters bearing some 3,700 pieces of rock island sponge valued conservatively at \$6,000.

Bill Would Change Lee County Fishing Law

A new Lee County fishing act which would supersede the special law put through in 1947 has been prepared for the Legislature. If passed, it would be unlawful to place or set any stopnet in the waters of Lee County.

In the present law is a provision making it unlawful for any net or seine to remain set at any place in the waters of Lee County for a longer time than three hours from the time the same is set. Unless stop-netters leave their nets in place long enough for the tide to change, they can't stop-net. This same provision is in the new law, except that the period is changed to four hours. That still is too short a time for stop-netting, but it makes provision for legitimate fishermen who may not be able to work their nets in three hours. Also reinforcing the stop-net ban in the present law is a provision restricting nets to 1,200 yards.

Some technical changes are being made in the restrictions on the nets that may be used within the inland waters of the county and the term "inland waters" is being redefined.

The new law would make it unlawful to fish nets of any kind or description within a quarter mile of any existing dock, pier or bridge in the county except Pine Island Bridge, where the distance is to be 100 yards.

Crawfish Bills Introduced

Two bills concerning the taking and sale of crawfish were proposed last month by the House Committee on Salt Water Fisheries. One measure would prohibit the



A fleet of shrimp boats from several Atlantic ports shown at the docks along the Miami River in Florida. The recent establishment of a new shrimp packing plant at Marathon by Crosland Fisheries of Miami (shown in background) caused a record number of shrimpers to converge on Miami for fuel, ice and supplies. (Courtesy, Miami Herald.)

commercial taking of crawfish weighing over three pounds. The other would make it unlawful to sell crawfish tails but sales of whole crawfish would be legal.

Bellinger-Built Trawler Going to Texas

The new 65' steel shrimp trawler recently launched by Bellinger Ship Building Co. of Jacksonville, has been sold to Varnum & Galloway of Port Isabel, Texas. She is the first vessel to be built at Bellinger's new location. The trawler was particularly designed for long trips, and her hold is insulated with Fiberglas. Her pilot house is raised to give full view aft. Designer of the new vessel was Tams, Inc. of New York, and power is furnished by a 190 hp. General Motors Diesel.

South Carolina Compromises on Crab Trawling Bill

The Senate Fish, Game and Forestry Committee last month apparently found a compromise move to end the dispute over spawning crabs in the State Senate. The Committee, headed by Sen. J. D. Parler, amended the bill so that it will apply only to that part of the South Carolina coast between St. Helena Sound and the Georgia State Line.

The bill prohibits trawling for crabs in inland waters and trawling for crabs inside the three-mile limit during January and February. Originally, it applied to the entire State.

Sen. O. T. Wallace of Charleston said the bill would have put the fishermen at Charleston out of business.

Sen. Harvey declared that the crab bill filled a "dire need" for the State to preserve female crabs about to lay eggs each year. He stated that the trawlers catch thousands of pounds of female crabs each year and that the practice was threatening the crab industry in the State.

The State Board of Fisheries recently held discussions with fishermen, trawlermen, marine scientists and others, regarding the crab situation, and concluded that its original recommendation for banning crab trawling during January and February should be changed to ban all trawling in inside waters. This would include trawling for crab, shrimp and fish.

However, the recommendation does not affect the use of cast nets, drop nets, haul (hand) seines, haul lines, rod and reel fishing and handline fishing.

Shrimp Boat Still Aground

The ill-fated shrimp boat *Roland* was still aground and capsized on the South Jetty at the Savannah River mouth April 9 after four days of fruitless efforts to salvage her. The Beaufort, S. C. trawler ran aground after running out of fuel in the treacherous channel. The crew escaped in a dinghy.

Efforts to pump water from the hull and right the boat have been unsuccessful. Capt. G. A. Boyd of Lazaretto Creek has been directing salvage operations.

Shad Season Extension Refused

An effort by two Georgetown legislators to relax shad fishing regulations in the State was beaten down decisively in the House of Representatives on April 25.

Reps. James B. Moore and Don V. Richardson sought to lengthen the commercial shad fishing season and to permit the use of smaller-mesh nets than now allowed. Their bill drew a majority unfavorable report from the Agriculture and Conservation Committee.

Rep. A. Eugene Brabham of Bamberg County said the number of shad were declining in the rivers of the State, and that commercial fishermen should be restrained from depleting the supply still further. He explained that shad return to their native rivers to spawn, and that the fish would die out altogether if sufficient roe shad were not allowed to go upstream beyond the nets laid by commercial fishermen.



The 55' shrimper "Miss Boa", owned by Manuel A. Boa of Brunswick, Ga. She has a capacity of 15 tons, and is painted with Pettit paint. Her power plant is a D13000, 115 hp. Caterpillar Diesel with 32 x 42 Columbian propeller which turns through 2:1 Twin Disc reduction gear. The vessel is equipped with Stroudsburg hoist and Ederer netting. Gulf fuel and lubricating oil are used.

Georgia Producing New Type Frozen Shrimp

Brunswick is one of the prime suppliers of a new frozen product, a deveined shrimp sold with the peel sliced the length of the back. M. A. Ries, president of the Jekyll Island Distributing Co. and vice-president of the Jekyll Island Packing Co., says the field for the new shrimp pack is much bigger than for the breaded type.

A deveining machine is necessary to produce the shrimp and Jekyll has just completed installation of eight automatic deveiners, after obtaining exclusive rights for retail packaging purposes from the inventor, a Pittsburgh, Pa. man.

The company plans to consolidate its Brunswick operations, and its plant at Macon will be closed. Supervisory personnel at Macon will be moved to Brunswick.

Jay Scher, plant manager, said another 100 employees will be needed. The consolidated operation, when in production, will have a payroll of about 300.

First Shrimp of Season Landed

Capt. Frank McDowell, skipper of the *Clara L.*, a boat belonging to the Lewis Crab Factory, on April 20 broke a famine that had closed down the production of shrimp at Brunswick since December. He came in with 100 lbs., including the heads, and on the 23rd one of Paul Moreira's boats came in with an 80-lb. catch.

The early catches are running about 45 count per pound, which is average for the first part of the season, and not too small for commercial demand. The larger sizes will not be caught before the approach of Fall.

Fishing Fleet Inspected

Courtesy motor boat inspections of commercial craft were conducted last month by the Thunderbolt commercial fishing flotilla, U. S. Coast Guard Auxiliary. A decal or certificate was issued following the inspection.

Huge Sturgeon Caught

A big sturgeon, weighing 132 lbs., which became stuck in the draw of the Seaboard Bridge over the Satilla River at Woodbine last month, was hand captured by the bridge tender, Buck Ellis.

Dressed out by Miller Bros. Fish Co. of St. Marys, the sturgeon yielded 13 lbs. of "caviar" plus \$35 to its captor. The fish jammed its head into a crack in the wooden guards alongside the draw and was unable to extricate itself.

New Surrette Battery Distributors

Three new distributors in the South Atlantic area have been appointed to handle Surrette marine batteries. They are the Machine & Supply Co., Beaufort, N. C.; Hay Oil Co., Charleston, S. C.; and Diesel Sales & Service, Miami, Fla.

Connecticut Fishermen to Be Paid for Gear Damage by Navy

On-the-spot settlement by the U. S. Navy for damage up to \$1,000 caused to the gear of commercial fishing vessels by Navy mines or torpedoes has been authorized. Congressman Horace Seeley-Brown gained the agreement with Rear Admiral George L. Russell, judge advocate of the Navy, on behalf of the Stonington dragger fleet.

Comdr. C. R. Harrison of the submarine base at Groton and Comdr. N. L. McComb of the Newport naval base are the legal officers for fishermen to notify when they recover one of the weapons.

Connecticut and Rhode Island draggersmen long have complained that the \$25 statutory reward paid by the Navy for recovery of mines and torpedoes is far from sufficient to cover the damage they cause. Previously claims for the \$25 reward had to go to the admiralty legal department in Washington, and from six months to a year were required to process them.

Start Catching Scup

First of the Summer run of scup was struck by the Stonington fleet April 29. Led by Capt. Manuel Madeira's *William Chesebrough* which hauled for 5,000 lbs., the fleet landed a total of 7,600 lbs.

On April 30, the first sturgeon of the year was landed by Capt. Harold McLaughlin's *Marise*. The rare fish, a 97-pounder, was shipped to Fulton Market.

Haddock and ling made their first appearance in quantity this year at the Stonington docks on April 23. A total of 3,300 lbs. of ling and 3,200 lbs. of haddock were reported.

European Oysters Growing Well

Three thousand European oysters which were brought to the Fish and Wildlife Service Laboratory at Milford in October, 1949, show promise of thriving in spots shunned by American oysters.

Dr. Victor L. Loosanoff, director of the Laboratory, imported the oysters from the cold waters off Bergen Op Zoom, Holland, and they have thrived in his laboratory tanks and in beds off the shore of Maine.

Richard Reed, chairman of the Maine Department of Sea and Shore Fisheries, co-operated with Dr. Loosanoff in bedding down more than 1,600 of the European oysters in Boothbay Harbor and in Franklin Bay, Maine.

The two things Dr. Loosanoff sought to determine were whether the European oysters would survive the severe American Winter—which they have—and whether they would propagate in the waters off Maine—which they are doing.

The European oyster is smaller and flatter than the American variety, has a rougher shell and whiter meat, is accustomed to cold and takes better care of its progeny. Where the American oyster sheds its young promiscuously, the European variety holds them in the shell until they reach the larva stage and are better able to control their movement. The results are the same because the European variety produces fewer eggs—approximately 500,000 by a four-year-old, compared with 50,000,000 produced by the American counterpart.

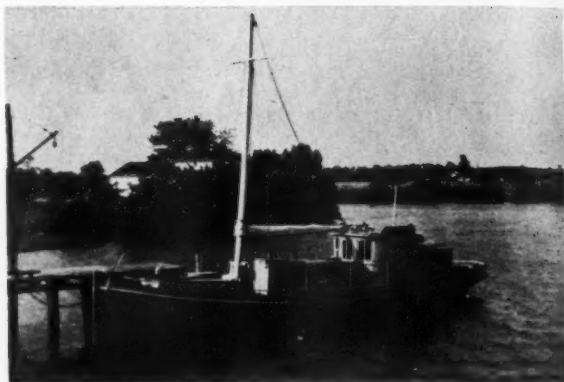
Scallop License Bill Passes House

The bill to regulate the Stonington scallop fishery passed the House of Representatives last month. It provides a \$10 season permit or 15c per bushel daily permits for scallopers in the Connecticut half of Little Narragansett Bay and in Stonington Harbor.

Overhauling and Outfitting

Capt. John Smith's *Ranger* recently was hauled out at the Mystic Marine Railway for Spring overhaul, painting with Woolsey paints, and installation of a keel cooler.

Noank Marine Exchange has installed White SurEcho depth sounders on Aldo Bacchiocchi's *Baby 2nd* of Noank, Capt. Antonio DaSilva's *Harold* of Stonington, and Capt. Barney Oakes' *Ruth M.* of New London.



The 44'6" x 10' x 4' pound net boat "Lena King", owned and skippered by Capt. Carter M. Keane of Kilmarnock, Va. Power is furnished by a 30 hp. gasoline engine with Hyde propeller. Sinclair lubricating oil, Columbian rope and Linen Thread Co. Gold Medal nets are used, and the vessel is painted with International paint.

Virginia Menhaden Operators Hold Annual Meeting

The Virginia Fishermen's Association, which is composed of those engaged in the menhaden industry, held its annual convention at Irvington and Reedville on April 23 and 24. Approximately 150 attended the meeting.

In one of the outstanding addresses, William McLeod of Dover, Ohio, prominent oil chemist, pointed out the numerous uses to which fish oil is now being put, including the manufacture of soap, candles, cosmetics, drying oils, etc., and suggested that the fish oil industry set up its own research program to find other fields in which its products may be used.

Maurice Rattray, Deputy Defense Fisheries Administrator, discussed the price ceiling and wage regulations and went into considerable detail on the proposed restrictions that will be imposed on the fish business under the present emergency.

E. H. Dahlgren, chief of the Section of Marine Fisheries of the Fish and Wildlife Service, pointed out that under Public Law 730 certain research could be inaugurated having for its purpose the determination of the spawning and migratory habits of the menhaden.

Although more menhaden are caught than any other species of fish, very little is known of the menhaden's spawning and migratory habits. A resolution asking the Fish and Wildlife Service to inaugurate a research program was adopted by the Association.

W. T. Covington, president of the McNeal-Edwards Co., was elected president of the Association for the coming year, and W. A. Mercer, J. Howard Smith Co., was re-elected secretary and treasurer. The fifty-year-old organization is believed to be the oldest continuous association in the industry.

Tangier Fishermen Doing Well

Fishing for herring, shad and hard crabs picked up considerably in April in Tangier and Pocomoke Sounds. During the first week of the month, trappers began to make a daily catch of from 3,000 to 4,000 herring and from 40 to 70 shad to the rig, which catches gradually increased to between 18,000 and 30,000 herring and 100 and 140 shad.

Most of the crab fishermen have been crab potting in Tangier Sound, where they have made some big catches. One week, Capt. Edwin Parks, fishing 80 pots in a small creek on the Eastern Shore of Virginia, made over \$500, and his brother, Milton Parks, made \$425.

Crab houses opened the first week in May. Among the first packers to start the season were Smith Parks, Will Parks, Ray Crockett, Harry Wheatley and Charles McCready.

Two other crab plants are now being built. These plants, to be operated by Captains Elmer Parks and William Pruitt, will open about the middle of May.

The menhaden catch also has been large. Pound fishermen in Tangier Sound are taking as many as 22,000 to the pound and selling them to the crab potters for \$1.00 a bushel and to the fish factories on the Western Shore of Virginia for \$5.00 per thousand.

Protest Oyster Application

At a meeting of the Virginia Commission of Fisheries in Newport News on April 24, a group of haul seiners protested an application by J. H. Waddell for 40 acres of oyster ground in North River near Ware Point, and the application was referred to inspectors to determine the extent of clammings in the area involved.

Blaise Hudgins, Vinton Hudgins, Willard Diggs, William Smith and Mack Owens of Mathews County were among the protestants. They testified that clammings was not uncommon in the area and that it was sometimes also used as a haul seine site.

Waddell, A. C. Jarvis and Charles E. King, oyster planters, and J. B. Farinholt, boat operator, testified on behalf of Waddell's application. They stated they had never seen clammers in the area in question, and said they thought the ground suitable for oyster planting.

Hampton Roads Area Landings

Hampton Roads area fish landings totalled 3,661,000 lbs. during April, which was a drop of approximately 1 1/3 million lbs. from March production but a 268,000-pound increase over April, 1950. Around twenty-five per cent of the catch was taken in pound nets.

Two species—scup and sea bass—accounted for nearly two-thirds of the catch. The scup yield was largest, totalling 1,247,700 lbs., followed by sea bass, with 1,079,000 lbs.

Provincetown Trap Fishing Season Gets Underway

The 1951 trap season got under way in Provincetown Harbor on April 9, with Capt. John Fields of National Traps making the first catch, which totalled about 21,500 lbs. of sea herring.

On April 17 approximately 5,000 lbs. of pollock and 7,000 lbs. of herring were landed at Cape Cod Fisheries, Monument Dock, from the Cape Cod trap, which is located off New Beach. The fish were brought in by the trap boat skippered by Capt. Ernest Souza.

A whale in one of the fishing traps inside the harbor in the lee of Long Point created considerable excitement among trap fishermen last month until the trap twine was let down and the huge mammal disappeared. Capt. Souza, who went out to unload two traps, said that the whale did no damage to the trap and finally left after having eaten about 30 barrels of herring.

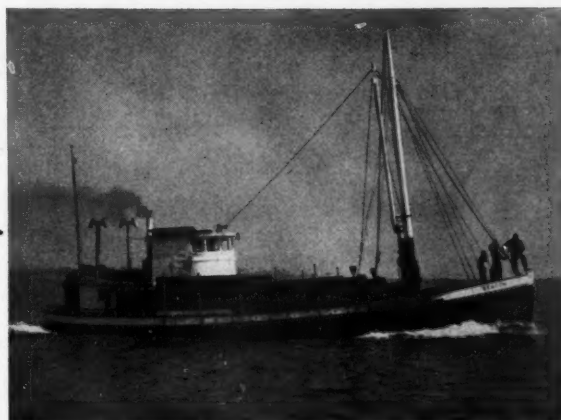
Sunken Scallop Removed

Removal of the sunken 42-ft. scalloper *Alberta II* from Provincetown harbor was completed last month. James Silva, who supervised the raising of the hulk, said most of the craft came apart as it was being removed, and was taken to the "dumping ground" about 7 miles off Wood End Light.

New Marine Research Institute Founded

A new marine research institute has been formed in the Woods Hole area. The new institute, named the Marine and Fisheries Engineering Research Institute, was incorporated as a non-profit organization to fill a gap between the marine research performed by scientific organizations and the practical engineering aspects required by the fishing industry and other industries with marine problems. The formation and organization of the Institute became possible through the initial financial support of the Friendship Fund, Inc. of New York.

Columbus O'D. Iselin, former director of the Woods Hole Oceanographic Institution, was named president of the new organization, while Francis Minot, Maritime



The 1500-bushel capacity oyster boat "Beacon", owned by the Beacon Oyster Co., Wickford, R. I. Skippered by Capt. George H. Dickerson, the 62' boat is equipped with a 100 hp. Fairbanks-Morse Diesel which swings a 44 x 32 Columbian propeller. She uses Socony fuel and lubricating oil, and Columbian rope.

Rhode Island Resumes Its Quahog Research Project

The quahog research program in Greenwich Bay was resumed about April 1 with the arrival of the 40-ft. *Phalarope II*, a Fish & Wildlife Service craft, and is now about to enter its second Summer. Work is being done to gather facts on the State's greatest fishery controversy—hand raking vs. power dredging of quahogs.

The Greenwich Bay study covers about 2700 acres, and there the scientists are attempting to find out the maximum sustained yield of an area being regularly worked by commercial fishermen.

The biologists have used a dredge boat to work Narragansett Bay and study the size of quahogs caught by dredges, the breakage of the shellfish by the power mechanism, the effect on the bay bottom and the mortality caused by smothering when the bottom is shifted quickly and in large chunks. Dr. Richard E. Tiller is in charge of the quahog research project.

Oyster Grounds Being Cleaned

The harvesting, or dredging of oysters by Warren oyster companies ceased the end of April, and work was started on cleaning the oyster grounds preparatory to planting a new crop. When the grounds are cleared, seed oysters three years old are brought in to grow for one or two years until they are large enough to harvest.

After four or five weeks of planting an inventory will be taken to get an idea of the condition of the grounds, and the Summer will be spent in overhauling the oyster boats and preparing for harvesting again in September.

The seed oysters for planting are brought up chiefly from Long Island Sound. During July, the spawning season, the huge piles of shells which accumulate all Winter along the Warren waterfront are loaded into boats and taken for distribution to the spawning grounds.

Consultant of Cotuit, became vice-president and director.

Munsey Heads Shellfish Officers Assoc.

Harwich's shellfish warden, Roger W. Munsey, was elected president of the Mass. Shellfish Officers Assoc. last month at the State House. Secretary of the group is Elmer Darling, shellfish warden for Orleans.

French Tuna Research Vessel Pays Visit

The 172-ft. French research vessel *President Theodore Tissier* was at Woods Hole last month for a three-day visit at the Oceanographic Institution. Scientists aboard the ship are currently engaged in investigating the concentration of bluefin tuna in the Atlantic Ocean.



The 40' fishing tug "J. B. Nelson", owned by Leonard A. Nelson of W. Sturgeon Bay, Wis., and powered by a 54 hp. Kahlenberg Diesel. Linen Thread Co. Gold Medal nets are used.

Great Lakes Smelt Yields Best in Many Years

The best smelt haul in ten years—836,000 lbs.—was made in Michigan's Great Lakes waters during January and February. Lake Michigan, primarily Green Bay, accounted for the entire catch, according to the Michigan Conservation Department.

March and April production of smelt, according to commercial fishermen in the Green Bay area, was even better. Record yields were made daily, and tons and tons of smelt were taken from commercial pound nets in Green Bay proper as well as Little and Big Bays de Noc.

In Saginaw Bay a good harvest of carp boosted production of this species to 200,000 lbs. during the two-month period, and put it in second place. The 1950 two-month total was 126,000 lbs.

Herring, which was on top last year, slid about 60% to 155,000 lbs. for third place. Commercial fishermen did not fish for herring as much as last year because the price for smaller fish was too low.

The catch of lake trout, principal victim of the sea lamprey, was down to 33,500 lbs.

Other species taken during the two-month period included yellow pikeperch, 142,000 lbs.; whitefish, 115,000 lbs.; suckers, 91,000 lbs.; mullet, 73,000 lbs.; and chubs, 63,000 lbs.

Total harvest by lakes was as follows: Michigan, 1,415,000 lbs.; Huron, 257,000 lbs.; Superior, 79,000 lbs.; and Erie, 1,300 lbs. Michigan jurisdictional waters of Lake Erie are closed December to March 10 for all commercial fishing except carp seining.

Electric Shocking Fails to Kill Lampreys

A plan to electrocute sea lampreys, which have seriously damaged Great Lakes trout fishing, was called a failure last month. The U. S. Dept. of Interior said the electric shocks killed fish instead of lampreys. The experiments were part of a \$250,000 government campaign to find a way to block the tide of lamprey immigration.

The tests showed that lampreys are extraordinarily resistant to electrical currents, even at very high voltages. A one second charge killed fish swimming by the shocking device, but left the lampreys unharmed.

Because of the reported low Vitamin A potency and oil yield of the sea lamprey, the eel-like predator is not valuable for commercial exploitation. Additional study and research, however, may bring out more encouraging factors.

Cold Storage Holdings of Freshwater Fish

Domestic cold storage holdings of freshwater fish have been lower since December than is customary for the time of year, according to the Fish & Wildlife Service.

Canadian holdings also were low as compared with the two preceding years.

Imports of freshwater fish, excluding fillets, during 1950 totaled about 54,000,000 lbs., and were not significantly larger than those of 1949. There has been a considerable increase in the importation of saugers, while imports of blue pike and tullibees have dropped off markedly.

Lake Superior Trout Yields Better

Yields of lake trout from offshore areas in Lake Superior showed improvement in April. Commercial fishing fleets were getting best results with large-mesh gill nets. Whitefish catches improved, but still were lighter than expected, and herring catches were fair.

Marquette netters laid nets on the first day of open-water netting operations about 25 miles northeast of the city; other operators set nets off Big Bay, Mich. In both instances they reported that there was no ice in those areas.

Marquette fishing companies, where about 50 men are employed, include Peter Anderson Fish Co.; Christiansen Bros.; Asplund's Fisheries; and the Emil Tormala, Eino Tuomela, Andrew Anderson, Bill Watcher, John LeBlanc, John Frazier, Louis Eliason, Leo and Stanley Doucette and Nels Blume fisheries.

Escanaba Fishermen Begin Taking Whitefish

The first Escanaba, Mich. commercial fishing fleet to start operations included boats owned by O. M. Johnson, William Tornovish, Harold Olson and Emil Perow. All of the vessels set nets for whitefish, with the first lifts light.

Hatchery to Plant Lake Trout

Russell Robertson, supervisor of the Cherry Creek fish hatchery of the Michigan Conservation Dept., reported that 400,000 lake trout fry will be planted in Lake Superior near Marquette, Mich. Some of them already have been released. Plantings will continue through late Summer.

Repair Lamprey Trap

Black River experimental lamprey control dam is being repaired and is expected to be completed by the time sea lampreys start spawning in streams flowing into Lake Michigan. The experiment to control the parasitic lamprey is a cooperative project of the Fish & Wildlife Service and the Michigan Conservation Dept.

The structure is so built as to permit passage of rainbow trout but stop spawning lampreys from moving upstream. A step and a short apron below the crest of the dam provide a jumping pool which permits the trout to move over the structure. A curved steel lip bolted to the face of the dam wall is designed so that lampreys can't scale it.

Bill Would Allow Keeping of Nets

The Michigan Senate recently passed a bill to eliminate a requirement that commercial gill nets must be deposited with conservation officers during closed seasons. Under the bill, the fishermen would be permitted to keep the nets under seal.

Join Ontario Federation of Fishermen

The West Lake Erie Association of Commercial Fishermen has again joined the Ontario Federation of Commercial Fishermen. John Stewart, Kingsville, Ont., was re-elected president of the group, while Edgar Field was re-elected secretary-treasurer, at the 1951 annual meeting held at Chatham, Ont.

Best Way to Pack Whitefish

Commercial fishermen operating in Canadian waters of the Great Lakes region found that prime pound-net whitefish packed in fresh condition were not maintaining quality over a long railway journey, and that the cause for it was that there were too many layers of fish in a box.

Dr. A. O. Blackhurst, Port Dover, Ont., a commercial fisherman, as well as an authority on Great Lakes fishes, said the problem can be overcome by packing only a single layer of whitefish to a box. He recommended the 50-lb. whitefish boxes for shipment.

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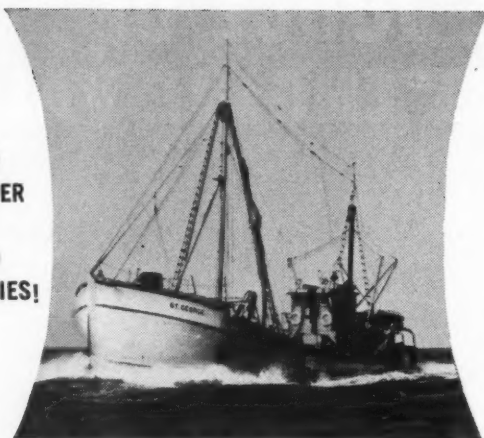
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New Jersey Gets Season's First Mackerel Catch

The season's first seiner mackerel trip was landed at Cape May, N. J. on May 1 by the Gloucester, Mass. vessel Alden, Capt. Frank Mineo. He brought in 15,000 lbs., receiving 15c for large fish and 10c for small, the same prices as last year.

The mackerel were exceptionally late in arriving this time. Last year the first trips were landed on April 11 by the Alden and Rosie & Gracie. The only other Gloucester seiner at Cape May this year for the opening of the season was the Frankie & Rose, Capt. John Senagra, but others were expected to follow as soon as the fish appeared.

Capt. Benjamin Curcuro of Producers Fish Co., Gloucester, who has been going to Cape May for many years to handle the mackerel catches, was on hand when the Alden arrived.

Party Fishing Boats Get Mackerel

The season's first big mackerel catches by party boats came into New Jersey Docks the first of the month. The fish were caught over a wide area, indicating that they were offshore in large schools.

Capt. John Ziegler's Skipper, sailing from Belmar, was one of the boats that came in loaded down with mackerel which were caught 20 minute's time from shore. He said mackerel were seldom caught in great quantities so close to the beaches.

At Cape May, one party boat owner reported 200 mackerel taken with jig and bait. Deep-sea party fishing was in full swing in the Cape May—Wildwood area late last month, and among boats with good catches of black-fish and sea bass were the Stroller and Gloria.

Dragger Launched for McClelland

The 77' x 17½' x 9' scallop dragger Brant, built for Capt. Donald A. McClelland of Point Pleasant, N. J. was launched April 25 by Bristol Yacht Building Co., So. Bristol, Maine. Mrs. Marjorie McClelland, wife of the owner, christened the craft which is a duplicate of the Vivian Fay, recently built by Bristol.

The Brant will hail from New York City, but is expected to fish out of a Maine port. She is powered by a 180 hp. Wolverine Diesel.

McClelland also owns the 60' dragger Sonya that operates out of New Bedford, Mass. and the 65' Petrel that fishes out of Atlantic City, N. J.

Shrimpers for Texas

(Continued from page 21)

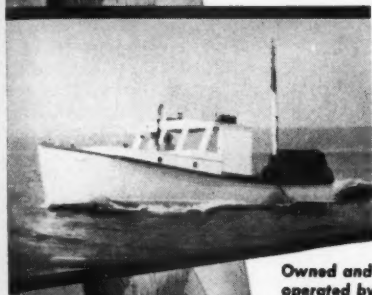
escape hatch. The 18' long engine room gives ample accessibility to machinery, and has fuel tanks extending its entire length on either side. A ladder runs to the main deck at the after end of the deckhouse. Fresh water tanks placed port and starboard of the lazarette, have a total capacity of 1500 gallons. The lazarette has a manhole plate over a ladder, and an 18" deck plate is placed over the forepeak which has a wood grating floor. There are 8" cowl ventilators for both engine room and fo'c's'le.

The 27' hold has a capacity of 300 barrels of shrimp, and is insulated with a 5" thickness of Dow Chemical Co. Styrofoam. The quarters on the main deck have 1" Fiberglass insulation on exposed bulkheads and under exposed decks, as does the underside of the exposed main deck over the fo'c's'le. Navicote paint was used throughout.

The ceiling of all quarters is sheathed with ¼" Masonite. In the quarters above deck the bulkheads are sheathed with ¼" fir marine plywood, while the deck in these quarters is covered with rubber tile. The exterior of the deckhouse and the hull down to the load water line were sand blasted and zinc spray metalized.

A Model 515½ Stroudsburg 3-drum hoist, driven from the main engine power take-off, is placed athwartship aft of the house. Two Danforth anchors, one 150 lb. and one 250 lb., are carried.

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Gloucester Fleet Landing Big Redfish Catches

Gloucester fish landings were at a high level during April, with many sizable trips, mostly redfish, being unloaded. Highliner for the month was the *Felicia* which hauled for a total of 670,000 lbs. from 3 trips. There were 13 other vessels that hauled for over four hundred thousand pounds for the month. They were the *Benjamin C.*, 631,500; *Julie Ann*, 557,000; *Bonaventure*, 516,000; *St. Peter II*, 504,000; *Cara Cara*, 460,000; *Holy Family*, 410,000; all of which made 3 trips; and the *Mother Ann*, 520,000; *Kingfisher*, 472,000; *Columbia*, 425,000; *Sunlight*, 415,000; *Mary & Josephine*, 410,000; *Theresa M. Boudreau*, 407,000; which made their catches in only 2 trips.

The largest single trip was one of 290,000 lbs., including 240,000 lbs. of redfish, brought in early last month by the *Mother Ann*, Capt. Jerome Noble. The next largest trips were 240,000 from the *Kingfisher* and 235,000 from the *Felicia*.

A single day's landings at Gloucester, on April 18 totalled nearly 1,700,000 lbs., mostly redfish.

New Trawler "Comet" Lands Good Trip

The new 106' steel trawler *Comet* landed her second trip on April 18, hauling for 230,000 lbs. at Gloucester. On her first trip, brought in on March 28, she had 210,000 lbs.

She was built by U. S. Shipbuilding Corp. at Yonkers, N. Y., and is operated by Milton Fisher, vice president of the Corporation. Her skipper is Capt. Paddy Eustis. The vessel is powered by an 8 cylinder, 12 x 15 Superior Diesel, rated 550 hp. at 400 rpm.

"Frankie and Rose" Changes Hands

The 104-ft. fishing dragger *Frankie and Rose* was bought last month by two brothers, Carlo and Joe Sinagra, Jr. Capt. Joe Sinagra, father of the two buyers, fitted out the craft for mackerel seining and expected to leave the end of last month.

Carlo Sinagra will be the skipper of the dragger *Eva II* this year, going whiting fishing.

Dragger Fire Put Out by Crew

A fire in the back of the engine room aboard the fishing dragger *Mary W.*, Capt. Peter Frontiero, was extinguished by the skipper and crew while the craft was still at sea some eight miles off Thatcher's on April 19.

New Firm Buys First Fare

A new concern comprised of Portuguese-American skippers, the Gloucester Fishing Co., bought their first fare of fish on April 12 when they got the trip of the dragger *Tina B.*, Capt. Simplicio Bichao.

Fish Pier Bill Reported Favorably

Legislation sponsored by the Gloucester Community Pier Association, Inc. authorizing and directing the State Public Works Department to repair the stores building at Gloucester State Fish Pier was reported favorably by the Committee on Harbors and Public Lands early last month.

General Seafoods Changes Name

General Seafoods' operations in Gloucester and other cities have been integrated with the Birdseye Division, another unit of General Foods, according to Robert A. Merchant, manager of the local plant and the one in Rockland, Me.

The local plant will be known henceforth as the Birdseye Gloucester plant, Birdseye Division of General Foods. It will continue to pack both Birdseye and 40-Fathom brand quick-frozen fish.

Given Testimonial Dinner

George A. MacInnis, mill manager of the Gloucester branch of the Linen Thread Co., Inc., was given a testimonial dinner last month on the occasion of his retirement. Mr. MacInnis has been employed with the local branch since 1908 and has been mill manager since 1947.

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New Bedford's "Pauline H." Lands Record Trip

The 90-ft. dragger *Pauline H.*, owned and skippered by Capt. Leif Jacobsen of Fairhaven, recently landed what was believed to be the largest catch brought to New Bedford in at least four years. The 117,200-lb. trip, principally haddock, cod and lemon sole, was worth more than \$8,500. The near-capacity catch was made on a seven-day trip to Georges Bank, and was landed on April 28.

A total of 6,871,200 lbs. of fish were landed in New Bedford during the month of March, bringing \$778,500. During the same period in 1950, the catch amounted to 6,895,600 lbs., valued at \$624,600.

Compile Price Ceiling Schedule

The New Bedford Seafood Producers Assoc. has compiled hoped-for boat level ceiling prices based on highest Winter and Summer prices received for fresh fish from October 1949 through September 1950. Rudolph B. Matland announced that the schedule covers 18 items of fish and shellfish making up the bulk of New Bedford landings.

The Seafood Producers Assoc. has placed itself on record as being strongly opposed to both the present ceilings on frozen fish and the contemplated ceilings on fresh fish. Members contend fish imports already have forced prices down until there is no need for price limitations.

Fisherman Awarded Damages

A New Bedford shark-fisherman whose crippled boat was fired upon by a Conn. Air National Guard plane has been awarded damages of \$900 by the Conn. House of Representatives.

William Lee Broderick's fishing boat was moored at a dock on Nomansland, near Martha's Vineyard, when she was hit by machine-gun bullets fired from a plane which

flew over the Island. None of the crew members who were present when the firing took place was injured.

Spring Overhauling and Fitting Out

Morris Rosenberg's *Carol and Estelle* has had a Spring overhaul at Beaconside Boat Co. in Fairhaven, and the *Arthur L.*, owned by Edwin Lenburg of South Dartmouth, has been fitted out. Workmen have rebuilt the pilothouse aboard the *Mary Canas*, which was damaged by fire.

A Hathaway hoist has been installed aboard the *Lois T.* of Gloucester by the Hathaway Machinery Co., Fairhaven, and the *Clinton*, owned by Correia & Sons, has been fitted for scalloping.

The *Janet and Jean*, owned by John Wilhelmsen of New Bedford, and the *Cape Cod* of Provincetown, owned by Manuel Phillips, have had new 50-watt Apelco radio-telephones installed by Whitehead Marine Radio of New Bedford.

"Grandpa" Gets New Quahog-Lobster Hoist

The 42' *Grandpa*, owned by Capt. Manuel Monty of South Dartmouth, has been fitted with a new single-drum Fisherman's Hoist made by Marine Machinery Co., New Bedford. A Twin Disc clutch and counter shaft were installed to operate the unit off the boat's Chrysler Crown engine. The equipment is especially designed for Winter quahogging and Summer lobstering.

Vessels Change Owners

Changes in ownership of two New Bedford fishing craft have been recorded. The *Mary Jo*, formerly owned by Edmund Conroy, Jr., is now the property of Michael Xifaras of Fairhaven, and William A. Pike of New Bedford has transferred his share in the 57-ft. dragger *Hope* to John R. Hillier, who is now the sole owner.

Dragger Runs Aground

The 45-ft. New Bedford dragger *Jessie Dutra* ran aground April 10 on Nomansland. Her three-man crew was picked up by the *Betsy C.* after spending 17 hours on the Island. The dragger is believed a total loss.

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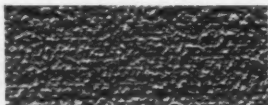
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Chesapeake Catch Fluctuations

(Continued from page 19)

croakers, the trawler usually can go to that location and catch croakers. If, at another time, sea bass are abundant the trawler can seek and catch them.

By contrast the pound net is a fixed net that must be set close to shore, typically in the Bay and in the lower end of its tributaries. It is limited to those fish which swim into its area and move past the net in such a way as to be led into its trap or pound end. It is further limited by the fact that the adaptable trawler is often able to go out and get the fish before they come into the pounds.

This example of adaptability versus the lack of same has had an interesting and significant history in southern New England. Once pound nets dotted the southern New England shoreline. During the twentieth century, however, the trawler has come into its own and the pound net has become almost a rarity. Thus, largely due to its adaptability the trawler has won out in open economic competition with the pound net. It may be that the same process is underway in Virginia except that open competition does not exist. With restrictions against trawler operations in the Bay, the pound net fishery is partially protected.

Urges Concentration on Shellfish

In his report to the Advisory Council on the Virginia Economy on the marketing of seafood, Professor Charles L. Quittmeyer pointed out several very significant problems that marketing brings to Virginia's fisheries.

He noted that the combination of resources, processing potentialities and natural marketing channels of other regions, such as New England and the large Pacific ports, put Virginia at a disadvantage in marketing most of the fin-fishes. He added that this disadvantage may become accentuated in the future, and suggested that it might be realistic to concentrate on the development of certain specialty quality products, generally other than fin-fish, in which the State could compete with some initial advantages because of local abundance.

In this category he placed the blue crab and the oyster, and he suggested other shellfish such as clams that to date have been relatively untapped as a resource in the State.

There is a most interesting and favorable relation between Quittmeyer's recommendation as a marketing expert and the potentialities as viewed by the biologist. Almost every form on which Mr. Quittmeyer suggests the State of Virginia should concentrate stands comparatively low on the food chain of the sea. And in a broad and general way, the lower the position on the food chain the greater the potential production.

Public vs. Private Oyster Grounds

With this background and comment on Quittmeyer's recommendations it is appropriate to consider Virginia's oyster industry both as an outstanding resource of the past and one on which we must depend in the future. Virginia has a combined system of public and private oyster grounds. The public ground was established in the 1880's by what is popularly known as the Baylor Survey.

In making such an all-inclusive survey and under pressure from the public to assure nothing would be left out, vast areas of bottom that will not produce without artificial cultivation were enclosed and, by error, some naturally productive bottom was left out. On the basis of this survey the entire area within the Baylor lines is designated as public oystering grounds and any citizen who pays a small license fee can harvest the oysters growing there. Areas outside the Baylor Survey are available for lease as private oyster grounds to be artificially cultivated by private enterprise.

The subsequent history of oystering in Virginia has been largely one of decline in the production from public oyster grounds, partially compensated for by a slight increase in production from the private oyster grounds. The success of the private grounds is quite amazing when it is recognized that generally only the poorer grounds out-

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side the Baylor Survey are available to private enterprise. Even so the acreage of privately leased ground increases annually and now exceeds 100,000 acres. With this development of private leases and with areas that can produce only by cultivation lying idle and unavailable within the Survey boundaries, there is an inevitable tension and conflict of interest between the private planter and the oyster tonger who works the public rocks.

The decline in production from the public rocks is a serious matter, especially disturbing when the private planters have demonstrated what can be accomplished through good management of marginal areas.

Overall Chesapeake Seafood Yield

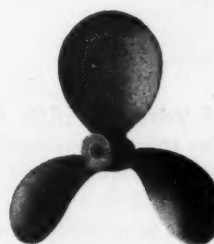
This account cannot be terminated without reference to the big question, "Have Virginia's seafood resources suffered an alarming decline?" I am certain you have heard people state dogmatically that there has been a decline. Students of fisheries problems are not so certain, though they do know of many special ailments, some of which may be normal as expressed above, and they generally believe production can be greatly improved.

Here are the figures supplied chiefly by the U. S. Fish & Wildlife Service and based on what might be called "cannass-estimate techniques." Since 1880, the year of the earliest figures, the total annual catch reported for Chesapeake Bay as a whole has averaged 316,414,000 lbs. The catch did not greatly exceed 200,000,000 lbs. annually in the 1880's; we have record of only four years in which the catch exceeded 400,000,000 lbs.; the top year on record is 1920 with 523,489,000 lbs.; and the catches of recent years have generally exceeded 300,000,000 lbs.

Briefly then, in terms of available data, the recent catches for the entire Chesapeake are not below average. Furthermore, the leadership in catch values has completely shifted from Maryland to Virginia. In the late nineteenth century the value of the Maryland catch was often about twice that of Virginia. Now the reverse is true.

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Use of Echo Sounders

(Continued from page 20)

As the lineal distance traveled by the boat between soundings may be sufficient to result in a serious loss of bottom detail, it is important that, when ultimate in bottom detail is required, the boat be held to a low speed. For average use, however, sonic depth recorders have been designed to give sufficient detail at boat speeds of from 8 to 15 miles per hour.

Valuable for Locating Fish

The sonic depth recorder has the ability to detect and present the evidence of any reflective matter suspended in the water between the soundhead and the bottom. Thus, heavy masses of seaweed or suspended debris may be detected, and most important to fishermen, schools of fish may be located.

There is much which is not yet known about the abilities of various materials to reflect sonic energy, but actual experience has revealed that light and occasional patches of underwater vegetation will not be indicated. Sponge and soft coral, unless in growths of considerable mass, will not be detected. Wrecks, whether of wood or steel, will be shown, with steel generally producing a much stronger echo.

Pelagic fish, either at the surface or in deep water will be detected and the penetration of the sonic energy into the school will provide an immediate indication of the density and thickness of the school. These functions have brought the sonic depth recorder to a position of prominence in fisheries operations to the extent that this equipment is now becoming standard on most new boats and is being installed on many older boats.

Echo-sounding electronic devices have taken out the guesswork or the "prospecting" element in trying or finding new fishing grounds. Before the use of these devices, fishing banks were found by pure chance or by the study of hydrographic charts. Now the master of any fishing vessel equipped with a sonic depth recorder can accurately locate the richest fishing banks.

Can Be Used in Most Types of Fishing

All types of fish that school closely and at not too great a depth, such as tuna, sardines, mackerel, herring, anchovies, etc. (taken mostly with purse seines) can be located with a sonic depth recorder. In addition, the tonnage of each particular school can be closely estimated. Since the bottom conditions that will be encountered can be determined before beginning a seine set, such a device will serve as insurance against damaged gear and will aid in making bigger catches possible.

Because gill-net fishermen find that by placing their nets along the edge of a ledge at a certain specified depth, catches are considerably larger, a sonic depth recorder makes it possible for this type of fisherman to determine exactly where a ledge is and in which direction it runs, regardless of visibility. The device enables the fisherman to spot his gear near the edge of the ledge and assures him that it will be set where he wants it.

Trawlers have found that generally it is not economically feasible to fish where unknown bottom conditions exist because serious damage or loss of trawl nets coupled with the loss of time involved can make this type of fishing unprofitable. However, a sonic depth recorder should aid the trawler captain to determine bottom conditions. This will help him to avoid obstructions and to fish the types of bottom most likely to contain fish.

It is reported that an experienced user of a sonic depth recorder aboard a trawler can frequently spot fish on the device several minutes before his trawl reaches them and, if necessary, he can change his course so that his net will pass through the heaviest concentration.

Sonic depth recorders have applications and uses also in trolling, set-line fishing, the shrimp fishery, and live-bait fishing. As the use of sonic depth recorders in the fisheries increases, new applications or variations of older applications are being and will be discovered.

Maryland Starts Planting Seed Oysters on Public Bottoms

Planting of seed oysters was started on the public-owned bottoms of the Chesapeake Bay and tributaries last month in areas designated by the Dept. of Tidewater Fisheries.

Capt. Amos W. Creighton of the Department said that about 165,000 bushels of seed oysters would be planted this Spring on public-owned bottoms.

At the same time, some seed oysters will be transplanted to give them a better growth for replanting during the next year.

The dredging of seed oysters in the Holland Straits area for sale to private planters was stopped after about 25,000 bushels had been dredged and sold to private planters.

During the past session of the Legislature a bill to prevent the sale of seed oysters for private planting was introduced by Delegates Riggan and Tawes of Somerset, but was killed during the closing minutes of the Legislature.

Scrap Metal Dredging Protested

A proposal made to the Army Engineers by a steel company to dredge a large area of the Potomac River to recover scrap steel is being protested widely and vigorously by watermen of the region and by the conservation agencies of Maryland and Virginia. The metal in question is that which has accumulated from years of firing projectiles from the Dahlgren Proving Grounds. According to the proposal the recovery operations would take place between Swann Point and Blackiston Island, in which area vast oyster beds are located.

The Potomac River Oystermen's Assoc., led by John E. Mayo, spearheaded the protest. In a letter to Gov. McKeldin he stated that this work would utterly destroy the best and most prolific natural oyster beds in the Potomac River and would seriously interfere with net fishing and crabbing.

Says Soft Clam Could Provide New Industry

The soft-shell clam, known commonly as "Manninose" bids fair to provide a new source of income for Maryland watermen hard-pressed by the decline of the oyster. Ralph C. Hammer, Dept. of Tidewater Fisheries shellfish culturist, discloses that scientific studies as to the clam's prevalence in State waters and its habits in these particular climes are being undertaken by his department.

Mr. Hammer believes that the soft-shell clam could provide the State with a modest new industry, one that would cover the slack period between the end of the oyster season and the beginning of the crabbing season.

Senator Mason Shehan of Talbot has introduced a bill that would place the soft clam under the provisions of the law applying to hard clams and would forbid anyone but bona fide Maryland residents from digging them.

He would make the taking for sale of soft clams subject to low-priced license, and would not permit the State to tax them once they were in the hands of seafood dealers.

Orders Study of Seafood Legislation

Dr. Charles E. Renn, Johns Hopkins professor and chairman of the Tidewater Fisheries Commission's Advisory Committee, has ordered an immediate study of fish and oyster measures enacted by the 1951 legislature.

Full support of the Advisory Committee has been promised by Gov. McKeldin, who explained that he would seek its opinion before acting on any seafood legislation passed by the 1951 Maryland Legislature.

If the new group considers more money essential, the Governor said he would be agreeable to the assessment of new fees on the seafood industry.

Tawes Named Fisheries Commissioner

Somerset County came up with an important appointment as the last session of the Maryland Legislature came to a close on April 3. This was the confirmation by the Senate of the appointment of John P. Tawes as Commissioner of the Department of Tidewater Fisheries.

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Equipment and Supply Trade News

New Bedford Pre-Measured Sisal Rope

New Bedford Cordage Co., New Bedford, Mass., has announced that pre-measured sisal rope, marked in red at ten foot intervals, is now available. Originally the entire capacity of New Bedford's special pre-measuring machines was devoted to manila, but additional equipment has now been acquired. The factory markings assure the customer of getting the exact amount of rope ordered and enable him to determine how much rope he has on hand.

As with manila, sisal rope leaves the factory packed in compact, protective cartons. For easy identification, size, weight and brand are clearly printed. The cartons are in red and black for manila—green and black for sisal.

Pamphlet Describes RCA Service Facilities

Details concerning their marine radio and electronic service facilities are described in a 12-page, illustrated booklet just issued by Radiomarine Corporation of America, 75 Varick St., New York 13, N. Y. Radiomarine offers service in 30 principal United States ports, and in 20 foreign countries through RCA International Division and Radiomarine foreign affiliates.

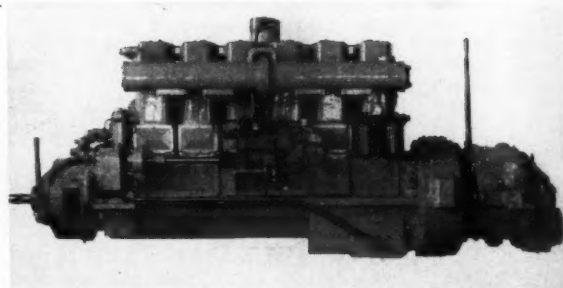
The booklet describes, in detail, the various types of "systematic service" plans available, and illustrates the varied assignments covered by Radiomarine technicians. These assignments range from refinishing chassis and repairing broadcast receivers to overhauling shipboard radar sets and surveying damage claims, and include free consultation service on FCC regulatory matters.

Also included is a 2-page map showing the location of all Radiomarine service depots and marine coastal radio stations with their addresses, 24-hour telephone numbers and managers' names.

New Double Seal Piston Ring

The Double Seal Ring Co. of Fort Worth, Tex. has introduced its new Inseal piston ring, first one-piece sealing ring with the sealing member located on the inner side of the ring. As it seals fully from both sides, the Inseal is ideal for use on single-groove, double-acting pistons. It is available in diameters from 4 to 96".

As the result of the location of the sealing member on the inner side, the ring exposes only one material to the cylinder wall, thus helping eliminate undue wear of in-



The new model D-100 Lathrop 6-cylinder 4-cycle marine Diesel which produces 100 hp. at 1000 rpm. Standard equipment includes generator with regulator and special auxiliary drive with V pulley for additional generator or pump.

sufficiently lubricated cylinder walls. Location of the sealing member on the inner side permits making the member from stronger materials, which, because of their propensity to wear, are not feasible for use in contact with cylinder liners. Possibility of breakage of the member thus is greatly lessened.

Double Seal recommends the Inseal for use in place of any presently used plain or sealing joint compression rings in two and four-cycle gas and Diesel engines, air compressors and pumps. Since it is a semi-locking ring, the Inseal is suitable for use in ported engines.

Twin Disc Booklet on Marine Gears

A 16-page engineering bulletin describing its new lines of hydraulic coupling marine gears (with optional trolling drive), and rubber-in-compression marine gears, has been released by Twin Disc Clutch Co. of Racine, Wis.

Data on engine housing sizes to which the gears may be fitted; engine speed and horsepower rating charts; and other information helpful to designers, boat builders and power converters, is contained in the pamphlet, No. M-161. In addition, there is a diagram of the new hydraulic trolling control, the Twin Disc Hydro-Troll.

Catalog on Osco Engine Conversion Kits

A new catalog has just been issued which describes in detail the parts and kits manufactured by Osco Motors Corp., Philadelphia 40, Pa., for marine conversion of Ford and Jeep engines.

The attractive 14-page booklet contains many illustrations, including drawings showing the installation dimensions of the various engine models and a performance estimate and propeller recommendation chart. The bulletin is well arranged, and despite the wealth of detail contained therein, it is a simple matter to select desired groups of parts or single items.

Aboe Film on Development of Power

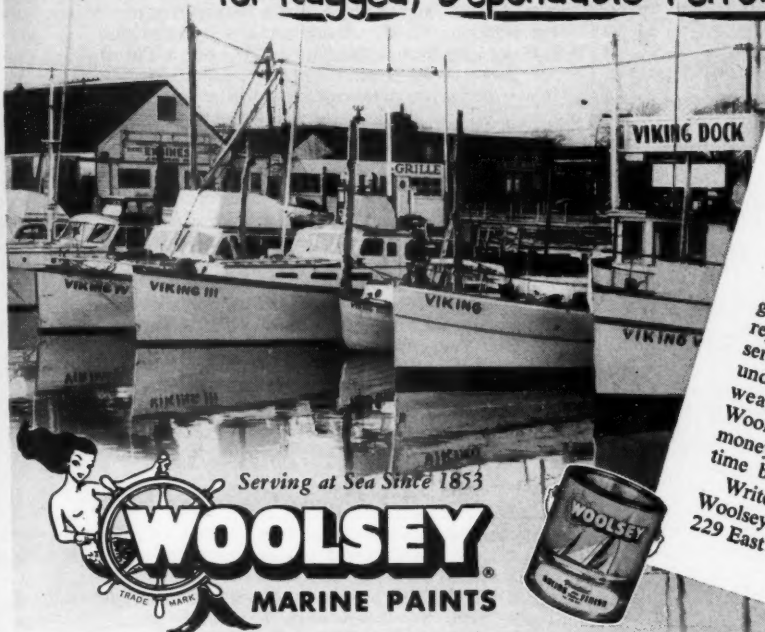
A new motion picture film "Power", that vividly portrays the development of power equipment down through the ages, then brings into dramatic focus the origin, growth and activities of the Brush-Aboe Group, England, parent of Aboe, Inc., New York, had its premiere showing to the press and company contacts recently at New York.

The film is a 16 mm., black-and-white production with a running time of 30 minutes. It demonstrates how, in step with the use of steam for the generation of power, the development of the Diesel engine impelled the Brush Company to extend its activities into the field of Diesel engine



The new 105 hp. Chris-Craft marine engine which is available with 1.5:1 or 2.04:1 reduction gear. Displacement is 236 cubic inches, bore is 3 7/16", stroke is 4 1/2" and weight in direct drive is 626 lbs.

Fishing Fleets use WOOLSEY PAINTS for Rugged, Dependable Performance



WAREHOUSES: Brooklyn, N. Y., Plymouth, N. C., Jacksonville, Fla., Houston, Tex.

The Viking Fleet
out of Freeport, L.I., N.Y.

Captain Carl Forsberg operates a fleet of seven fishing boats out of the Viking Docks at Freeport, N. Y. All boats in the fleet are Woolsey painted—Vinyl Anti-fouling on their bottoms and Cawlux Marine Finishes on their topsides, decks, cabin tops and cockpit areas. Captain Forsberg has found that with Woolsey, his boats require repainting not more than once a year and their bottoms remain clean and free from fouling the year around.

This kind of super service has given Woolsey Marine Paints a reputation for extra value, longer service and rugged dependability under all conditions of water and weather. Fishermen know that Woolsey Paints will save them money and give them more fishing time between haul-outs.

Write for free literature. C. A. Woolsey Paint & Color Co., Inc., 229 East 42nd St., N. Y. 17, N. Y.

B.F. Goodrich Cutless Bearings For Propeller Shafts



Soft rubber, water lubricated, Cutless bearings give years of trouble free service on fishing vessels. Resist heat, oil, and wear. Quiet and protect shafts too. There is a size and type to fit your boat.

Available at Boat Repair Yards and Marine Equipment dealers.

Lucian Q. Moffitt, Inc.
AKRON, 8, OHIO

Engineers and National Distributors

PFLUEGER Hooks

Sharp
Points—
Strong
Steel

Ask for Pflueger Hooks and you save money with the finest fish hook construction known. Tough steel and dependable finish give you extra long service from every hook. Points are needle sharp—hooks hold their shape.

Ask your supplier

THE ENTERPRISE MFG. CO., AKRON, OHIO
Over 87 years making Fishing Tackle

PFLUEGER
(Pronounced "FLEW-ER")

A GREAT NAME IN TACKLE



For any marine purpose . . .

CHRIS-CRAFT MARINE ENGINES

. . . are the world's best buys!



Model B, 60 h.p.

Model K, 95 h.p.



Model KL, 105 h.p.

Model KBL, 131 h.p.



Model M, 130 h.p.

Model ML, 145 h.p.



Model MBL, 158 h.p.

Model W, 160 h.p.

RUGGED Chris-Craft Marine Engines are specially built for marine use. Year after year, they provide superb performance, are economical, dependable, trouble-free. Chris-Craft Marine Engines are available in 60, 95, 105, 130, 131, 145, 158 and 160 h.p. Reduction drives and opposite rotation available for most models. For any marine use, your best marine-engine buy is Chris-Craft!

READ WHAT USERS SAY!



Joe Fair

"I've been a Chris-Craft Marine Engine owner for 12 years," writes Joe Fair, sportsman, Lake Worth, Fla., "and, consequently, have enjoyed 12 years of really carefree boating pleasure. During this period, I owned two Chris-Craft-powered runabouts—operated them in both salt and fresh water with never a delay due to engine trouble. They have always run smoothly and economically, year after year. There isn't a better marine engine built anywhere than a Chris-Craft!"

Fishermen! Chris-Craft Marine Engines can stand the gaff of tough, commercial operation and give you economical, trouble-free service! Ask your marine dealer, boat yard or boat builder for data, or write for **FREE** catalog.

Chris-Craft

MARINE ENGINE DIVISION

CHRIS-CRAFT CORPORATION, ALGONAC, MICH.

WORLD'S LARGEST BUILDERS OF MARINE PRODUCTS

manufacture and to form the Brush-Aboe group of companies.

Four Diesel manufacturers—Mirrlees, Bickerton and Day, J. & H. McLaren, Petters, and Henry Meadows—were brought together with the Brush Company. The manufacturing processes and products of all the factories are shown, from the smallest Petter engines to the 2,880 hp. sixteen-cylinder Diesels made by Mirrlees.

Bosworth Monck, executive vice-president of Aboe, Inc., 350 Fifth Ave., New York City, announced that the film is available for presentation to interested groups.

Raytheon Moves New York Office

Raytheon Manufacturing Co., Waltham, Mass. announces the transfer of its New York and International Sales Offices to 19 Rector Street, New York 6, N. Y. The telephone number, Whitehall 3-4980 and cable address, RAYTHEONEX, New York, N. Y. remain unchanged. This new location offers advantages which contribute to the maintenance of prompt service to Raytheon's dealers and customers abroad and in the New York Sales District covering New York, lower Connecticut, New Jersey, Delaware, Pennsylvania, Virginia, District of Columbia and North Carolina.

Raytheon products represented include the Mariners Pathfinder radar, Fathometer echo depth sounders, radio-telephones and other marine electronic equipment.

Fairbanks-Morse Opens Cleveland Branch

Another new sales and service office, their sixth completed thus far in their present plan of expansion, has just recently been opened at 3000 West 117th St., Cleveland, Ohio, by Fairbanks, Morse & Co., Chicago. Harry E. Brown, who has been with Fairbanks-Morse for more than a quarter of a century, is manager.

The new structure, with an area of about 30,000 square feet, represents the latest modern design and includes not only the Cleveland Branch Office, but also a modern Diesel repair shop, large warehouse, repair parts department and display floor.

At the recent dedication approximately a thousand visitors, including dealers, customers, city officials and company officials attended. Those present from the Chicago headquarters office included Robert H. Morse, Jr., president; L. W. Stolte, vice-president and treasurer; and O. O. Lewis, vice-president in charge of sales.

New Pressurized Fire Extinguisher

American-LaFrance Foamite Corp., Elmira, N. Y., has announced a new pressurized, one-quart fire extinguisher which has trigger-quick action and hits the target instantly and accurately. It discharges vaporizing liquid, and is compressed air expelled, thus eliminating hand pumping. The new fire extinguisher is easily recharged and can be readily pressurized with any standard air chuck exerting 150 psi; such as commonly used in gasoline service stations.

The extinguisher is for class B and C fires such as in motors, motor boats, electrical equipment and all other risks involving small oil and grease fires. It is a faster operating and more easily controlled extinguisher at the fire area than the hand pump type unit.

Frank L. Orr

Frank L. Orr, vice-president and sales manager for the Maxim Silencer Co. of Hartford, Conn., died in Washington, D. C. on April 15th while on a business trip.

Mr. Orr was born in 1894 at Saunderstown, R. I. In World War I, he served as an ensign in the destroyer service. He was a mining engineer in Colorado for a time after the war. Later, he was with the Diesel Engine Division of Fairbanks, Morse & Co., and in 1930 joined Maxim.

Mr. Orr, a well known yachtsman, was a member of the American Society of Naval Engineers and the Society of Naval Architects and Marine Engineers.

Fisheries Convention

(Continued from page 18)

subject taken by L. J. Reizenstein, Falk & Co.; Walter Berger, president, American Feed Manufacturers Association, spoke on "The Feeding Picture for 1951"; and the need for research in the by-products field was stressed by H. E. Crowther, chief, Technological Section, Fish & Wildlife Service, who spoke for F. Bruce Sanford, F&WS, Seattle, Wash.

Breaded Shrimp Clinic

A breaded shrimp clinic which was held under the chairmanship of Charles D. Alhadeff of Seattle, drew much interest. Prior to the convention, the Fish & Wildlife Service had purchased in leading cities five packages each of 26 different brands of breaded shrimp. After the samples had been coded, the labels were destroyed completely; then the samples were transferred to Dr. B. E. Proctor, technologist at the Massachusetts Institute of Technology, for analysis.

During the clinic, two packages of each brand were put on exhibit for those attending to examine first-hand and see for themselves the variance in quality, count of shrimp, and the quantity of breading used in each sample.

After examination of the samples on exhibit, M.I.T.'s findings were reported to the assembled group. Max Meyer, Sam Lewis, Joe Mullis, and Karl Envoldsen then led a discussion regarding the size and quality of the shrimp and the type and amount of breading used. In particular, Sam Lewis challenged those present to give NFI support for its program to improve both the product and the package. The discussion resulted in a recognition of the need for uniformity.

Public Relations Sub-Committee Named

President Usen at the Directors' Meeting appointed Arthur Freeman, Jack Fulham, Henry Goodrich, Harold Luther, and Jack Willis as a frozen packaged fish and shellfish sub-committee of the NFI Public Relations Committee. The sub-committee will appoint its own chairman and report to the chairman of the NFI Public Relations Committee.

The newly-appointed Public Relations Sub-committee will have the power to meet with all those firms selling frozen packaged fish and shellfish in the United States and to recommend a program for advertising and publicizing such products. The program would be supported by contributions from those interested in the promotion of frozen packaged fish and shellfish products. Also, the sub-committee was authorized to determine with the chairman of the NFI Public Relations Committee a fair contribution from its funds to the general administrative budget of the NFI Public Relations Program for the utilization of the services of the NFI staff.

This special program would be totally separate from the general NFI Public Relations Program which features all varieties of fish and shellfish. The appointment of other committees for such groups as fresh fish and shellfish, canned fish segments, or any other individual groups in NFI who are interested in promoting similar individual publicity campaigns is planned.

The Directors unanimously decided to close the San Francisco office of NFI and transfer Mal Xavier to the Washington office.

Dedications and Presentations

J. L. Alphen of General Seafoods Corp., Boston, who was chairman of the convention, was named "man of the year" when the 1951 Fisheries Yearbook was dedicated to him. The honor also carries with it a life membership in NFI. Others who received certificates of life membership were L. A. Greene, B. W. Shipman and Charles Triggs.

In appreciation for their leadership during the past year, President and Mrs. Irving Usen were presented an inscribed silver tray. One of the outstanding achievements of the Usen administration was the obtaining of 217 new members.

(Continued on next page)

WIRE ROPE



**Ashore and afloat, Roebling
is the most famous name
in wire rope**

WHETHER FOR standing rigging, trawler lines or other marine service there's a Roebling wire rope made specifically for the job. Roebling has always been a leader in developing and producing wire rope for the fishing fleets. From making the steel to drawing and stranding the wire, every manufacturing step is scientifically controlled to assure top-most quality.

Rig with Roebling wire rope for maximum service life and long-run economy. Your Roebling Field Man will be glad to help you choose the *right* ropes for every purpose. Write or call him at your nearest Roebling branch office. John A. Roebling's Sons Company, Trenton 2, New Jersey.



ROEBLING

State of Maine Marine Distributors

KOHLER MARINE GENERATORS

All Sizes AC - DC

From
350 to 10,000
Watts



MARINE ELECTRONICS

Sales and Service

RCA and BENDIX Equipment
SPERRY Automatic Steerers

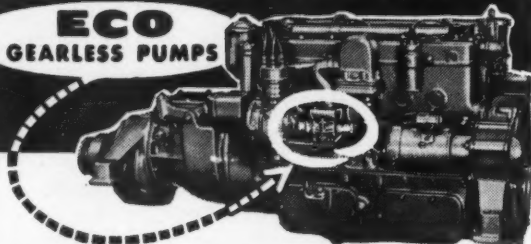
THE HARRIS COMPANY

PORTLAND, MAINE

Complete Line of Marine Hardware and Paints

NORDBERG selects

ECO
GEARLESS PUMPS



A leading manufacturer of gasoline marine engines, Nordberg Manufacturing Co., uses Eco Gearless Pumps exclusively as original equipment for the new improved line of Knight, Marlin and Arrow models of gasoline marine engines. Eco is the most versatile pump for all marine purposes, giving long life and trouble-free performance even in muddy and silty waters. Ideal for circulation, bilge, showers, fresh water systems, deck washing, etc. Yard uses include hull washing, sinking piling in sandy or muddy bottoms. Operated by electric motors, air cooled gasoline engines or as part of regular boat engines. Bearings require no lubrication. Pumps in either direction against pressures up to 100 lbs. per sq. in. Capacities 1/10 gpm to 20.7 gpm. Sizes 1/4", 3/8", 1/2", 3/4". Run at speeds from 300 to 3400 rpm. Available in Naval Bronze Forgings or Stainless Steel pump bodies, which last indefinitely, will not corrode. Also available with By-Pass.

SEND FOR ECO PUMP BULLETIN M2

Manufacturers of Gearless Pumps for Marine,
Industrial, Farm and Home Use.

ECO ENGINEERING CO.
12 NEW YORK AVENUE NEWARK 1, N. J.

The highlight of the Old Timers' Banquet was an award to John Matthews, who was the first chairman of NFT's Old Timers' Club. In recognition of his distinguished service in launching this branch of the Institute, Mr. Matthews was presented a pair of book-ends depicting models of the famous Gloucester Fisherman Monument with the inscription, "To John Matthews, Kingfish of the Year."

On the day preceding the convention, delegates enjoyed a trip out of Boston Harbor aboard the trawlers *Crest*, *Flying Cloud* and *Wisconsin*. Following the business sessions, the convention goers were taken on a tour of the Gloucester waterfront and treated to an old fashioned New England clam bake at nearby Magnolia.

Board of Directors

New regional directors of the National Fisheries Institute include the following: Region 1—John A. Fulham, Fulham and Herbert, Boston; L. Vernon Drape, Louis A. Drape, Inc., Fall River, Mass.; Robert W. Howlett, Mid-Central Fish Co. of Maine, Portland; James Carlson, Baker, Boies & Watson, Boston; Sidney Jones, Booth Fisheries Corp., Boston; Moses Pike, Holmes Packing Corp., Eastport, Me.; Capt. John G. Murley, Fairhaven, Mass.; John DelTorchio, Cape Ann Fisheries, Gloucester, Mass.

Region 2—Ammon G. Dunton, Virginia Fishermen's Assn., White Stone, Va.; Charles Ballard, Ballard Fish & Oyster Co., Norfolk, Va.; Charles Woodfield, Woodfield Fish & Oyster Co., Galesville, Md.; H. L. Claxton, R. W. Claxton, Inc., Washington, D. C.; August Strauss, Galilee Fish Co., New York; Jerome Kiselik, Flag Fish Co., New York; George Wallace, Wallace Fisheries Co., Morehead City, N. C.; Willis Gregory, Florence Fish & Oyster Co., Florence, S. C.

Region 3—Frank E. Welles, E. E. Saunders & Co., Pensacola, Fla.; John Santos, Patterson Shrimp Co., Patterson, La.; W. W. Gillis, Taltavull Shrimp & Oyster Co., Biloxi, Miss.; Victor Gonzales, Star Fish & Oyster Co., Mobile, Ala.; Morgan Daniel, General Seafoods, Inc., Port Lavaca, Texas; Max Meyer, Meyer Fish and Produce Co., Jacksonville, Fla.; Larry Strassburger, Envoldsen Shrimp Co., New Orleans, La.

Region 4—Louis Vitale, Los Angeles Smoking & Curing Co., Los Angeles; E. T. Meakin, Tamalpais Fishing & Packing Co., San Francisco; Albert Levy, Washington Fish & Oyster Co., San Francisco; Lloyd Turnaclyff, Meredith Fish Co., Sacramento; Tom Lazio, Tom Lazio Fish Co., Eureka, Calif.; Malcolm Goldie, Van Camp Seafood Laboratories, Terminal Island, Calif.; C. M. Merry, Holly Seafood Co., Los Angeles; E. C. Jack, E. C. Jack Brokerage Co., Los Angeles.

Region 5—Chas. D. Alhadeff, Whiz Fish Products Co., Seattle; E. A. Ruthford, San Juan Fishing & Packing Co., Seattle; Jack Mendenhall, Ketchikan, Alaska; Myer Bornstein, Bornstein Seafoods, Bellingham, Wash.; John McCallum, McCallum-Legaz Fish Co., Seattle; D. W. Hager, New England Fish Co., Astoria, Ore.; John McGowan, Columbia River Packers Assn., Astoria, Ore.; Gordon Bruce, Portland Fish Co., Portland, Ore.

Region 6—E. M. Concannon, Walker's Fulton Fish Co., Chicago; E. J. Lynch, Lynch Fish Co., Cincinnati; Lawrence Knapp, Knapp Bros. Co., Pittsburgh; Karl Envoldsen, Envoldsen Shrimp Co., Cleveland; Carl Pass, Independent Fish Co., St. Louis; Wilson C. Smithers, Robbins, Inc., Chicago; O. R. Juhl, Olsen Fish Co., Minneapolis; Harold Dornbos, H. J. Dornbos & Bro., Grand Haven, Mich.

Oyster Convention at Washington in August

The Hotel Statler in Washington, D. C., will be headquarters for the 1951 convention of the Oyster Growers and Dealers Association, the Oyster Institute of North which will be held August 13-16.

Holding of the convention in Washington will permit wide participation by Governmental personnel on problems of the industry. As was done last year for the first time, an August date was selected so that the reports of the convention will help publicize the opening of the oyster season on September 1st.

Fish Landings

For Month of April

Hailing fares. Figure after name indicates number of trips.

GLOUCESTER

Acme (1)	1,000	Madame X (10)	22,000
Addie Mae (1)	3,000	Madonna De Trapanni (3)	14,000
Alden (2)	47,000	Magellan (2)	125,000
American Eagle (3)	77,000	Manuel F. Roderick (1)	96,000
Anna Guarino (12)	35,500	Margaret L. (1)	1,000
Annie (16)	49,000	Margie L. (4)	13,500
Annie II (4)	14,000	Margie & Roy (11)	13,500
Ann & Marie (4)	24,000	Maria Immaculata (8)	75,500
Anthony & Josephine (10)	37,000	Marie & Winifred (3)	129,000
Ariel (5)	12,500	Marion & Alice (2)	156,000
Ave Maria (2)	201,000	Marjorie (2)	73,000
Baby Rose (2)	265,000	Marsala (1)	69,500
Barbara C. (15)	35,570	Mary (15)	44,200
Benjamin C. (3)	631,500	Mary E. (6)	13,000
Bernie & Bessie (5)	15,500	Mary F. Curtis (2)	296,000
B. Estelle Burke (3)	260,500	Mary & (1)	1,000
Bonaventure (3)	516,000	Mary & Josephine (2)	410,000
California (4)	69,000	Mary Rose (1)	150,000
Capt. Drum (3)	82,000	Mary W. (2)	148,000
Cara Cara (3)	460,000	Mayflower (2)	3,500
Carlo & Vince (3)	42,500	Mellena II (10)	23,000
Carol Ann (1)	145,000	Minkette 1st (7)	9,900
Catherine (8)	18,000	Mocking Bird (1)	120,000
Catherine Amiraunt (2)	418,000	Mother Ann (2)	520,000
Chanco (2)	295,000	Nancy F. (2)	61,000
Charlotte M. (1)	130,600	Natalie III (3)	215,000
Chebeague (3)	73,000	No More (12)	42,500
Cigar Joe (3)	112,000	Novelty (9)	34,500
Columbia (2)	425,000	Nyoda (2)	62,000
Comet (1)	230,600		
Conquest (2)	333,600	Olivia Brown (1)	89,000
Curlew (2)	365,000		
Dale (3)	13,900	Paul Howard (1)	144,000
Dartmouth (3)	245,500	Peggy Belle (1)	1,000
Dawn (12)	29,200	Philip & Grace (2)	264,000
Dolphin (3)	300,000	Phyllis & Mary (3)	94,000
Doris F. Amoro (2)	165,000	Pilgrim (2)	367,000
Doris H. (4)	23,000	Pioneer (1)	2,000
		P. K. Hunt (1)	107,000
Edith L. Boudreau (1)	70,000	Pollyanna (2)	243,000
Eleanor (2)	44,000	Positive (2)	229,000
Eleanor Mae (4)	37,000	Priscilla (6)	11,500
Emily Brown (2)	362,500	Puritan (1)	147,000
Estrella (2)	391,000		
Eva II (7)	13,700	Raymonde (2)	131,000
Eva M. Martin (1)	2,000	R. Eugene Ashley (2)	57,000
Evelina M. Goulart (1)	100,000	Rita B. (3)	262,000
Evelyn G. Sears (1)	40,000	Roberta Dee (3)	14,500
Falcon (10)	39,000	Roma (1)	1,000
Felicia (3)	670,000	Roma II (6)	5,000
Florence & Lucy II (1)	182,000	Ronald & Mary Jane (2)	318,000
Frances F. McPherson (2)	325,000	Rose & Lucy (2)	86,000
Frances R. (1)	60,000	Rosemarie (3)	103,000
Frankie & Jean (6)	28,500	Rose Mary (2)	36,000
		Rosie & Gracie (1)	15,000
Gaetano S. (3)	350,500	Ruth E. (4)	6,000
Gertrude D. (1)	2,500		
Gertrude E. (3)	11,000	Sacred Heart (11)	30,500
Golden Eagle (2)	285,000	St. Anthony (2)	345,000
Hazel B. (1)	120,000	St. John (9)	28,000
Helen M. (1)	1,000	St. Joseph (4)	170,000
Hilda Garston (1)	128,000	St. Mary (5)	79,000
Holy Family (3)	410,000	St. Nicholas (1)	190,000
Holy Name (2)	51,000	St. Peter (3)	96,000
Ida & Joseph (3)	141,000	St. Peter II (3)	504,000
Immaculate Concept'n (4)	130,000	St. Providence (12)	33,500
Irma Virginia (12)	68,000	St. Rosalie (2)	163,000
		St. Victoria (3)	332,000
Jackie B. (2)	60,000	Salvatore & Grace (3)	162,500
Jackson & Arthur (8)	24,000	Santa Lucia (6)	37,000
J. B. Junior (5)	63,500	Santa Maria (2)	83,000
Jennie & Julia (5)	128,000	Santina D. (4)	71,500
Jennie & Lucia (3)	207,000	Sebastiana C. (4)	132,000
Johnny Baby (14)	30,400	Serafina II (1)	33,000
Joseph S. Mattos (2)	217,000	Serafina N. (4)	105,000
Josie II (6)	64,000	Skilligolee (3)	158,000
Julie Ann (3)	557,000	Sol (2)	140,000
		Sunbeam (3)	169,000
Killarney (1)	185,000	Sunlight (2)	415,000
Kingfisher (2)	472,000	Sylvester Whalen (1)	167,000
Lady of Good Voyage (2)	152,000	The Albatross (2)	325,000
Lassgehn (5)	13,500	Theresa M. Boudreau (2)	407,000
Leonard & Nancy (1)	31,500	Thos. J. Carroll (1)	135,000
Leretha (2)	210,000	Tina B. (2)	163,000
Linda B. (10)	34,500	Trimembral (10)	24,900
Little Flower (5)	102,000		
Little Joe (5)	32,000	Uncle Guy (1)	85,000
Little Sam (1)	2,500		
Lois T. (1)	7,000	Viola D. (5)	50,000
Lorine III (2)	84,000		
Louise (2)	300,000	We Three (10)	19,500
		Wild Duck (2)	234,000

PITTSBURGH TOPSIDE WHITE Stays White Longer!



Really Tough and Durable!

HERE'S a topside white that will not discolor from fumes from fuel, foul water, dock and harbor sewage or industrial gases. It's whiter when it goes on and it stays white longer!

● **Pittsburgh Superstructure White** goes on easily, too, and dries quickly to a highly resistant elastic finish that gives long-lasting protection you can count on. It will not chalk excessively, nor crack or mar easily. Sun, wind, rain, ice and salt spray don't affect this great seagoing paint which is at home in all extremes of temperature.

● **Pittsburgh** has the finish for your marine need, whatever it may be. Write for free booklet that can save you time and money.

● **IMPORTANT NOTICE TO SHIP CHANDLERS!** Although Pittsburgh Marine service covers most important ports, we have a few opportunities for ship chandlers. If interested, write, wire or phone the factory nearest you.

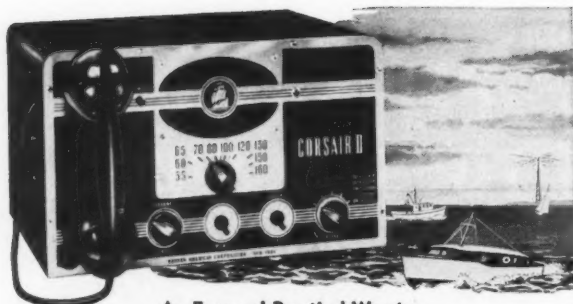


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Industrial Paint Division, Pittsburgh, Pa.
Factories: Milwaukee, Wis.; Newark, N. J.; Springdale, Pa.; Houston, Texas; Los Angeles, California; Portland, Ore. Ditzler Color Div., Detroit, Mich. The Thresher Paint & Varnish Co., Dayton, O. Forbes Finishes Div., Cleveland, Ohio. M. B. Suydam Div., Pittsburgh, Pa.

PITTSBURGH
Marine Finishes

PAINTS • GLASS • CHEMICALS • BRUSHES • PLASTICS
PITTSBURGH PLATE GLASS COMPANY



An Easy and Practical Way to
Enjoy Versatile, Safe Communication

HUDSON AMERICAN'S CORSAIR II

Marine Radio Telephone

Ship-to-Ship . . . Ship-to-Shore conversations, Coast Guard for emergency, Broadcast Programs—all are easily and dependably yours with Hudson American's Corsair II! Yes . . . in appearance and circuit design . . . with a broadcast band and its regular four channels . . . the Corsair II gives you the most in marine communications at the least possible cost.

Because it is compact in size, yet powerful enough for a large craft, you can rely on the Corsair II for all-around performance. That's why you owe it to yourself and to your boat to first compare the Corsair II. Ask any Hudson American owner!

See your local Hudson American dealer today.

Or write for further information.



HUDSON AMERICAN CORP.

A subsidiary of Claude Neon, Inc.

25 West 43rd Street

New York 18, N. Y.

YOU MIGHT AS WELL EXPECT

A HOME RUN



FROM A SLUGGER
WITH A

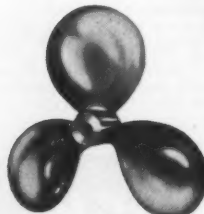
BROOMSTICK

. . . as top-notch performance from a
good engine fitted with an inferior or
badly selected propeller . . .

ASSURE YOURSELF

BALANCED POWER
with

MICHIGAN PROPELLERS



Made in all
sizes up to 60"

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that matches your engine and hull perfectly — scientifically designed for maximum
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BOSTON

Acme (5)	27,000	Margaret Marie (3)	4,900
Addie Mae (5)	20,500	Maria Christina (3)	5,300
Adventure (3)	264,000	Maria Del S. (8)	19,600
Agatha & Patricia (2)	99,300	Maria Giuseppe (5)	16,200
Alphonso (5)	25,100	Marietta & Mary (2)	75,500
Angie & Florence (4)	84,000	Maris Stella (3)	285,600
Annie & Josie (7)	17,200	Marsala (3)	108,000
Arlington (3)	498,500	Mary & Jennie (4)	27,700
Assertive (2)	209,400	M. C. Ballard (3)	335,000
Atlantic (3)	328,000	Michigan (2)	380,700
Ave Maria (6)	25,900	Nancy B. (2)	59,800
Barbara C. Angell (3)	432,500	Neptune (3)	336,300
Bay (3)	436,500	Nova Antonio (6)	24,800
Bonnie (3)	421,800	Ohio (2)	259,400
Brighton (2)	245,700	Olympia (3)	120,600
Calm (2)	362,700	Olympia La Rosa (4)	212,700
Cambridge (3)	467,000	Pam Ann (2)	238,000
Capt. Bill (1)	11,500	Phantom (3)	496,900
Carmela Maria (5)	61,300	Pioneer (5)	46,200
Carole June (2)	169,300	Plymouth (3)	394,800
Catherine B. (L. Tr'ler) (8)	53,900	Plymouth Belle (1)	12,800
Catherine T. (1)	74,000	Princess (4)	48,000
Clipper (1)	42,100	Racer (3)	469,300
Crest (3)	602,000	Red Jacket (2)	386,000
C. R. & M. (4)	79,400	Robert & Edwin (4)	17,700
Dorchester (2)	299,200	Roma (6)	29,400
Drift (2)	360,200	Rosalie D. Morse (2)	275,800
Eddie & Lulu M. (8)	7,100	Rush (2)	296,500
Elizabeth B. (2)	168,500	Sacred Heart (5)	15,700
Esther M. (3)	406,800	St. Ann (1)	6,000
Eva M. Martin (4)	11,400	St. Anna (6)	33,800
Famiglia (3)	56,300	St. Francis (5)	55,700
Flying Cloud (3)	504,500	St. Michael (8)	30,900
4-A-823 (1)	5,100	San Antonio (6)	29,500
4-C-688 (5)	17,200	San Calogero (5)	45,800
4-G-370 (8)	35,600	Santa Antonio II (1)	14,800
4-G-673 (7)	28,400	Santa Rita (7)	38,100
4-H-823 (6)	35,100	Santa Rosalia (6)	20,300
4-R-662 (3)	10,400	Santo Antonio II (1)	11,800
Francesca (7)	39,600	Savoia (7)	43,200
Iva M. (2)	66,700	Sea Fox (1)	16,000
J. B. Junior (3)	480,500	Shirley & Roland (1)	10,000
J. B. Junior II (4)	27,200	Six Bros. II (6)	31,300
Joe D'Ambrosio (5)	21,700	Stanley B. Butler (1)	91,500
Josephine F. (Dragger) (1)	5,900	Surge (3)	539,700
Josephine F. (L. Tr'ler) (9)	52,300	Texas (3)	361,100
Josephine P. II (3)	81,000	Thomas Whalen (3)	410,200
Josie M. (4)	23,200	Triton (3)	385,200
Leonarda (5)	19,100	Two Pals (3)	13,500
Leonard & Nancy (2)	87,900	Victory II (4)	49,500
Liberty Belle (3)	40,600	Virginia (3)	193,700
Little Joe (7)	23,900	Wave (3)	599,000
Little Sam (4)	39,400	Weymouth (2)	285,500
Lucky Star (2)	250,300	William J. O'Brien (3)	452,000
Lynn (3)	422,000	Winchester (3)	479,500
Mabel Mae (3)	270,800	Winthrop (1)	125,500
Madonna De Trappani (1)	10,000	Wisconsin (3)	599,000
Maine (3)	492,000	Yankee (5)	56,900

PORTLAND

Agnes & Elizabeth (1)	43,900	Lilo (2)	6,800
Althea (4)	87,300	Little Flower (1)	2,000
Andarte (2)	151,800	Lucy Scolia (1)	4,100
Annie Louise (1)	12,500	Marjorie Parker (2)	50,600
Arch (1)	48,000	Mary & Helen (2)	11,600
Brookline (2)	291,600	Nora Sawyer (2)	18,700
Carolyn & Priscilla (1)	99,200	Notre Dame (1)	46,000
Challenger (3)	10,200	Ocean Clipper (2)	72,900
Clara Louise (1)	96,800	Queen of Peace (3)	75,700
Crescent (7)	52,800	Richard J. Nunan (2)	63,800
Cynthia (3)	10,300	St. George (2)	425,000
Elinor & Jean (4)	141,700	Sea King (2)	68,300
Estella A. (2)	6,900	Silver Bay (1)	197,000
Estrella (1)	3,000	Theresa R. (2)	197,600
Ethelina (3)	155,400	Thomas D. (2)	202,900
Evzone (2)	45,200	Trinity (2)	51,000
Florence & Lucy II (2)	377,100	Vagabond (3)	139,600
Francis R. (1)	1,200	Vandal (2)	194,800
Geraldine & Phyllis (2)	229,300	Vida E. (3)	15,100
Lawrence Scolia (3)	18,500	Villanova (1)	94,000

NEW YORK

Alvan T. Fuller (2)	126,500	Olivia Brown (1)	82,000
Beatrice & Ida (2)	80,000	Raymonde (1)	5,000
Catherine C. (2)	94,800	Richard Lance (2)	44,100
Demand (1)	25,500	Rosalie F. (3)	116,500
Edith L. Boudreau (1)	24,600	S #31 (3)	118,300
Evelina M. Goulart (1)	63,000	Sally & Eileen (2)	76,500
Felicia (3)	197,000	Sol (1)	55,700
Florence B. (3)	97,000	Susan (2)	55,500
John G. Murley (1)	79,000	Teresa & Jean (2)	113,500
Katie D. (3)	173,800	The Queen (3)	173,000
Lady of Good Voyage (1)	61,000		

Scallop Landings (Gallons)

Bright Moon (1)	300	Olive M. Williams (1)	550
Buzz & Billy (3)	3,150	Peerless (1)	200
Friendship (1)	900	Rainbow (1)	775
Gloria F. (2)	1,450	Quest (2)	900
Hazel S. (1)	180	Reid (3)	2,000
Major J. Casey (1)	900	Sunapee (1)	625
Mary Ellen (3)	1,047	Venture (2)	475
Muskegon (2)	1,500	Victoria (1)	800
New Dawn (2)	1,625	Whaling City (2)	2,200
Norseman (2)	1,550	White Cap (2)	850

NEW BEDFORD LANDINGS

Adventurer (4)	76,800	Junojaes (3)	79,000
Anna C. Perry (3)	44,400	Kelbarsam (2)	28,900
Annie Louise (1)	7,900	Lera G. (4)	46,800
Arnold (3)	38,200	Liberty (1)	9,900
Austin W. (3)	33,000	Lillian B. (1)	3,900
Barbara M. (3)	64,700	Magellan (1)	7,000
Bernice (4)	23,500	Maria-Julia (4)	44,600
Black Hawk (2)	36,000	Mary A. (1)	5,000
Bozo (1)	2,700	Mary J. Hayes (3)	243,700
Cape Cod (1)	11,100	Mary-Jo (1)	6,500
Capt. Bill (2)	21,500	Mary & Joan (2)	135,500
Capt. Deebold (4)	107,300	Mary M. (2)	30,000
Carl Henry (3)	133,700	Minnie V. (4)	51,900
Catherine T. (1)	55,000	Molly & Jane (3)	83,500
Chas. E. Beckman (4)	57,600	Noreen (2)	138,200
Connie F. (2)	51,800	Paolina (2)	66,000
Dauntless (4)	93,000	Pauline H. (3)	275,100
Driftwood (2)	12,300	Phyllis J. (5)	40,100
Ebenezer (1)	3,200	Pilhasca (1)	8,000
Edith (2)	21,300	Princess (2)	29,400
Elva & Estelle (4)	71,600	Reliance (3)	7,700
Eta K. (4)	33,600	Reneva (1)	9,600
Eugene & Rose (4)	128,900	Roann (2)	40,700
Eunice-Lillian (4)	194,600	Rose Jarvis (2)	12,300
Gannet (3)	233,600	Rosemarie V. (2)	27,500
Gertrude D. (1)	9,000	St. Ann (3)	72,900
Gladys & Mary (3)	119,400	Sandra & Jean (1)	17,900
Growler (3)	74,700	Sea Fox (3)	35,600
Harmony (3)	29,500	Sea Hawk (2)	64,100
Helen B. (4)	96,800	Shannon (3)	55,800
Hope (3)	27,700	Solveig J. (2)	104,500
Huntington Sanford (3)	25,800	Sonny & Joyce (1)	3,000
Invader (4)	46,800	Sonya (3)	46,500
Ivanhoe (3)	54,300	Stanley B. Butler (2)	152,100
Jimmy Boy (3)	36,200	Susie O. Carver (3)	36,500
J. L. Stanley (1)	600	Three Pals (3)	21,800
Joan & Tom (3)	46,700	Two Bros. (NB) (3)	30,200
Joan & Ursula (3)	141,200	Venture 1st (3)	98,200
John G. Murley (1)	57,500	Victor Johnson (3)	48,600
Julia K. (2)	15,400	Victory II (1)	8,500
June Bride (4)	55,200	Viking (4)	31,500
		Viking (Chil) (1)	2,900
		Viking (NB) (2)	58,000
		Whaler (3)	211,600
		Winifred M. (4)	27,200

Scallop Landings (Gallons)

Abram H. (3)	3,375	Linus S. Eldridge (2)	2,250
Adele K. (2)	2,250	Louis A. Thebaud (1)	500
Agda (1)	925	Lubenray (2)	2,250
Alpar (2)	2,250	Malene & Marie (2)	2,150
Amelia (3)	3,375	Marie & Katherine (2)	1,469
Anastasia E. (1)	560	Marmax (2)	1,861
Antonina (2)	1,850	Martha E. Murley (2)	1,900
Barbara (1)	535	Mary Anne (2)	2,250
Bobby & Harvey (2)	2,038	Mary Canas (2)	1,810
Bright Star (2)	1,847	Mary E. D'Eon (2)	2,286
Camden (2)	2,085	Mary & Julia (2)	2,136
Carol & Estelle (2)	2,250	Mary J. Landry (1)	1,025
Catherine & Mary (2)	2,250	Mary R. Mullins (1)	900
Charles S. Ashley (2)	2,180	Mary Tapper (1)	900
Charlotte (2)	850	Moonlight (3)	3,375
Christina J. (2)	1,691	Nancy Jane (1)	1,125
Clinton (1)	150	Newfoundland (2)	2,250
Dagny (2)	1,600	Olive M. Williams (1)	700
Doris Gertrude (2)	2,180	Palestine (2)	2,100
Dorothy & Mary (2)	2,185	Pearl Harbor (2)	2,250
Eleanor & Elsie (1)	700	Pelican (2)	2,250
Elizabeth N. (2)	1,465	Porpoise (3)	3,361
Fairhaven (2)	1,825	Red Start (2)	2,250
Flamingo (2)	1,933	Sea Hawk (2)	1,980
Fleetwing (1)	1,125	Sea Ranger (2)	2,250
Francis J. Manta (2)	2,236	Sailyn (2)	2,250
Janet & Jean (2)	2,200	The Friars (2)	2,050
Jerry & Jimmy (3)	3,275	Ursula M. Norton (2)	2,236
Josephine & Mary (2)	2,320	Vivian Fay (2)	2,175
Kingfisher (2)	2,250	Wamsutta (2)	2,250
Lainee K. (1)	200	Wm. D. Eldridge (2)	2,250
Liboria C. (2)	1,550		

STONINGTON, CONN.

America (6)	12,800	Lindy (5)	4,500
Averio (5)	*15,300	Lisboa (15)	22,300
	2,300		*20,600
Bette Ann (13)	*3,800	Marise (16)	16,200
Betty Boop (8)	16,200	Mary H. (13)	11,500
Carol & Dennis (1)	17,500	Old Mystic (8)	38,300
Carolyn & Gary (15)	4,600	Our Gang (3)	4,100
	26,200	Pvt. Frank Kessler (4)	19,400
Connie M. (14)	*11,000	Ranger (4)	16,800
	18,900	Russell S. (4)	29,700
Eleanor (12)	*10,500	Stormy Weather II (4)	32,200
Fairweather (10)	3,500	St. Peter (14)	12,700
Five Sisters (1)	24,200	Theresa (4)	35,200
Harold (15)	400	Vagabond (6)	4,900
	19,200	Weezie May (13)	9,900
Irene & Walter (15)	*5,000	William B. (16)	30,700
Jane Dore (14)	28,500	Wm. Chesebrough (2)	5,600
	4,200		
	*7,700		

* Trash Fish

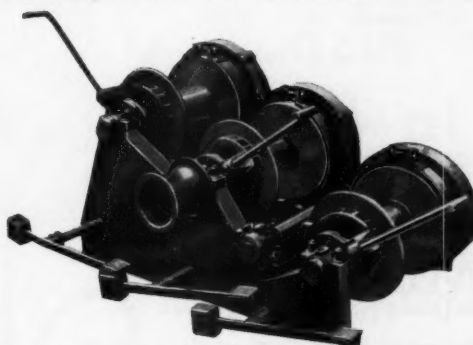
Delaware Bill Would Change Enforcement Body

Delaware's Senate passed on April 24 and sent to the House a bill to give the State Shell Fisheries Commission, rather than the Game and Fish Commission, the exclusive right to enforce State fishing laws in the Delaware River and Bay, as well as the Atlantic Ocean.

ATLANTIC FISHERMAN - MAY, 1951

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Made in Single, Double and Triple Drum Models

Made of the most durable materials, Stroudsburg Hoists are designed to provide maximum length of service at minimum cost. The friction drums have ratchet, pawl and brakes with interwoven type linings, and are engaged by internal thrust cams with friction plates. Pinion shaft extension available for mounting engine drive in clockwise or counter clockwise rotation. Write for complete specifications.

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"The Fishermen's Choice is the Stroudsburg Hoist."

News For

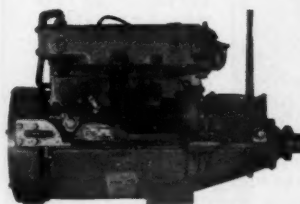


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*starting motor, oil cooler and generator with voltage control. Power take-off available for captains' boats.

*Also available for hand starting with vertical magneto less starting motor, generator and distributor.



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MUSTAD
Key Brand FISH HOOKS

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sels. Its comparatively low cost means every boat owner can afford a Mariners Pathfinder Jr.

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RAYTHEON MANUFACTURING COMPANY
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*Reg. U. S. Pat. Off.

North Carolina Area Closed to Navigation by Army Engineers

Navigation regulations announced recently by the Corps of Engineers of the Department of the Army prohibit all vessels other than those operated by the United States Navy or Coast Guard from entering the Neuse River and tributaries at Marine Corps Air Station, Cherry Point, without prior permission of the enforcing agency. The only exception is in cases of extreme emergency.

The restricted area is that portion of the Neuse River within 500' of the shore along the reservation of the Marine Corps Air Station, Cherry Point, extending from the mouth of Hancock Creek to a point approximately 6,800' west of the mouth of Slocum Creek, and all waters of Hancock and Slocum Creeks and their tributaries within the boundaries of the reservation.

Fisheries Legislation

Two measures on which members of the Commercial Fisheries Committee of the State Board of Conservation and Development have done months of work headed for certain death in the Senate last month.

Sen. Sam Campen of Pamlico asked that both of the measures be sent back to his Commercial Fisheries Committee until a bill is prepared that everyone can understand.

One of the bills would repeal numerous local laws, leaving local regulations to the Conservation Board. The other measure would consolidate and revise commercial fishing statutes and levy a license tax on out-of-State commercial fishermen.

Rockfish Run Expected

The rockfish (striped bass) run up the Roanoke River, which reaches its peak near Weldon, was expected to start about the middle of April. By the thousands the rockfish suddenly begin driving upriver to their spawning grounds, and for four weeks Weldon is the fishing capital of the area. Then, as suddenly as they came, the rockfish are gone.

During the run, Weldon is the scene of a fish hatchery operation which is unique. The hatchery, owned by the town, is operated jointly by the N. C. Dept. of Conservation, the N. C. Wildlife Resources Commission and the Fish & Wildlife Service. Heavy-laden female fish are stripped of their eggs—for which the fishermen are paid.

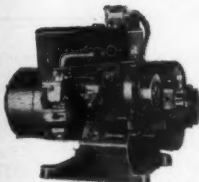
Apply for Oyster Bottom Leases

The following persons have applied for leases of oyster bottom in Carteret County: Mrs. Iris Fulcher, Clayton Fulcher, Jr., Mrs. Lucille Fulcher and Harry B. Fulcher, all of Atlantic; Raymond Nelson of New Bern; Harold F. Howell, Jr., William Mason, and Allen Graham, Jr. of Newport; and Arthur T. Goodwin of Roe.



Commercial mackerel fishing is done by the "Sandpiper", 38' boat which is owned by Capt. W. D. Aman of Jacksonville, N. C. The vessel is painted with Pettit paint, and has a 131 hp. Gray gasoline engine fitted with 1.5:1 Snow-Nabstedt reduction gear and turning 22 x 16 Columbian propeller. She uses Linen Thread Co. Gold Medal nets.

ONAN MARINE Electric Plants



Compact, true marine design with built-in safety features. Provide dependable electric power for lights, bilge pumps, radio, appliances, on pleasure or work boats. One and two-cylinder heavy-duty water-cooled engines assure long life. Easy to install. A.C., D.C. and Dual Purpose models — 350 to 3500 watts.

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Long Island Fishermen's Assn. Re-Elects Pell President

At the annual meeting of the Long Island Fishermen's Association, Inc., held at West Sayville last month, W. Rodman Pell, head of Pell's Sea Food Market, Greenport, was unanimously re-elected president of the Association for the fifth consecutive year.

Other officers re-elected were Joseph Tuttle, Eastport, vice-president; Nelson Van Wyen, West Sayville, recording secretary; Nicholas Griek, West Sayville, secretary-treasurer. The board of directors also was re-elected.

During the past year the Association has been actively engaged in working for the improvement of the three ocean inlets at Fire Island, Shinnecock and Moriches.

Report on Great South Bay Survey

The present unsatisfactory condition of Great South Bay for the production of market oysters is the result of excessive pollution by organic matter traced directly to duck farm sewage from the western portion of Moriches Bay, according to a report prepared by the Woods Hole Oceanographic Institute.

The report filed by the Massachusetts research organization is a result of a survey made of Great South Bay last Summer at the request of the Islip Town Board, the Long Island Fishermen's Assoc. and shellfishing concerns in the section.

According to conclusions reached by the team of marine engineers from Woods Hole, the situation would be best corrected if the sewage from the duck farms located on streams emptying into Moriches and Bellport Bays could be prevented from reaching the waters of Great South Bay.

"Judy Ellen" Lost

The skimmer boat *Judy Ellen*, owned and operated by Jack Tuttle of Eastport, sank on the west bar in Shinnecock Inlet recently. The *Judy Ellen* had gone to the aid of the skimmer boat *Liberty*, also owned by Jack Tuttle and operated by his brother Vernon, which had become grounded on the bar.

Due to the pounding of the sea on the grounded craft, the *Judy* sprang a leak and it was necessary for Capt. Tuttle to take to a rubber raft. He made his way safely to the *Liberty* which by this time had freed herself.

Two days before the *Judy Ellen's* mishap, two other draggers, the *Lucky Strike* and the *Bessie*, had to be pulled off the bar and several days previous, the draggers *Fish Hawk* and *Wm. Winters* sustained considerable damage by hitting the bar. During March, the skimmer boat *P. F. II* was lost in Shinnecock Inlet.

Capt. William S. Warner

Capt. William S. Warner, a lifelong fisherman and a native of Hampton Bays, passed away at the age of 59 last month. Capt. Warner served as a director of the L. I. Fishermen's Assn.

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EASY...to break out.

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Shipbuilders

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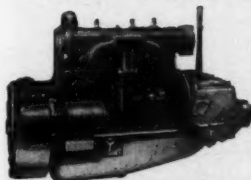


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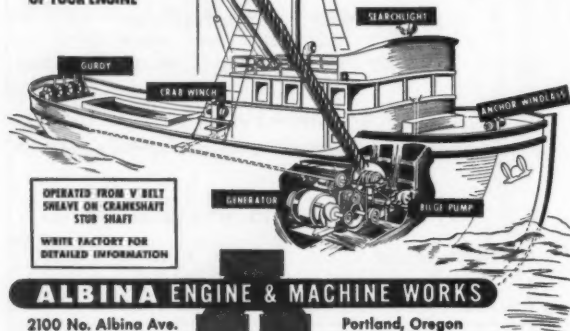


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Vineyard Bailings

By J. C. Allen

April has dropped below the skyline, a month that did not bring a great deal of joy to the sea-skimmers. Plenty of encouragement, certainly, raising hopes more or less, but cockeyed weather split the luck about forty-sixty, with the balance in favor of the fish.

Our gang fished or tried to fish every hour that offered a chance, but they got blown out of water, or blown home again and again and again. So that as yet they can only guess what may be going on between four and 40 fathoms.

Spring fish showed up in varying numbers, right on schedule. In fact, there was some slight showing of Summer fish such as scup, in the gear, and one lad picked up a couple of bluefish in his drags. But, as might be expected, the heft of the haul was seasonal stuff without variation.

One thing stands out as sharply as a wind-jammers bowsprit; there are cod everywhere; small fish for the most part, running barely to market size, but so far as the experience shows, there are some of these in every damp spot. It strikes us as a good sign.

During the month, in spite of the weather, it is our opinion that the local fleet took more haddock than they have for years at this season of the year. Although haddock are always thin after spawning, these fish were so large that they weighed very well indeed. It is not considered a good sign to see fish running large and even. It has been believed locally, for generations, that when this happens, it marks the peak of a cycle, and that from this point, for a space, the number and size will drop sharply.

According to this same brand of reasoning, the cod should be on the increase, and guard knows, all hands hope that this is true.

Today, the water is alive with herring, and the black-fish have followed them inshore as seldom seen before. But nobody catches them. Scarcely anyone has taken herring even to eat this Spring, in the face of a tremendous run. Fifty or 75 years ago, all hands would have been busy taking them, and making money doing it. It is no fault of nature if many people won't eat herring today.

Nor is it any fault of nature that our sea-skimmers, like almost everyone else, have developed into a class of specialists. Specializing is wonderful, all hands will tell you so. They will explain, and truthfully, that the specialist is the lad who collects the fees, draws the heavy sugar as salary, and so on. But what they never mention is the fact that he is the first man to get out of a job when anything slips in the economic machinery.

Lobstermen are as scarce as halos in hell. A few bold souls set some gear nearly a month ago, some may try it some time later, but nobody expects to get many lobsters. And yet, while this condition prevails on the ledges inshore, and has done so for a couple of years, the draggers are bringing in gobs of the biggest kind of lobsters from off-shore, many of them loaded with eggs. There may not be anything wrong with this picture, but be damned if it looks right to us!

Whatever may be due in the way of luck, seems apt to strike early. The occasional sole, flounder, skate, scup and what-have-you, have appeared and taken a hook days ahead of any previous record. The water is warm, and all things are favorable, but we look for whatever luck there may be, on the most rocky bottom.

By all the rules and rulings of the gods that be, the finest hand-line fishing in a generation ought to be this year. But who will fit out to follow it, we just don't know! Too slow, they say, and it may be so. But as we have said before, a dory and a ten-dollar bill is worth a lot more to a man than a deck-load of dignity and a flock of bills staring him in the face.

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Canadian Report

By C. A. Dixon

The first of the month things looked quite encouraging when purse seiners located sardines along the Charlotte County coastline in the Lepreau area. They succeeded in catching fairly good hauls for a few days, and afterward went across the Bay of Fundy to Digby, N. S., and repeated their good luck for a day or two; but the schools of fish played out suddenly, and since then only small lots have been captured in the Southern New Brunswick region. Those who pretend to know say the fish are those left over from the Fall school of 1950, as is indicated by the varying sizes in different places. They claim that if a new school should appear the fish would run evenly or nearly so as to size, especially if the school should happen to be of large proportion. Fishermen are hoping that a real school of sardines will strike in the middle of May, as that is the usual time for such to appear.

According to H. J. Robichaud, director of the Fisheries Division of the Department of Industry and Development in the New Brunswick government, the sale of scales last year brought to the sardine fishermen of the Bay of Fundy area \$346,587. This was not the only by-product to prove profitable for the fishermen, most of whom are becoming more and more conscious of the advantage derived from the sale of by-products in general. Processors in the same area sold \$75,000 worth of oil derived from fish, and \$42,000 worth of fish solubles. In addition, reduction plants produced fish meal worth \$400,000, and fish skins also brought in a nice bit of money when they were sold to a New Brunswick glue factory. Mr. Robichaud estimates that the sale of fish by-products alone brought close to \$1,000,000.

New Brunswick fishermen scored an all-time high in the total valuation of fish caught in the Province in 1950—243,508,400 lbs. which had a total landed value of \$6,746,642. The increase in the year's catch amounted to 54,615,200 lbs., and the increase in the landed value amounted to \$85,894. Total landings in 1950 topped the record catch of 1948 by 21,000,000 lbs.

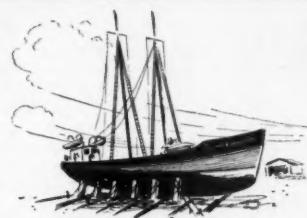
In Mr. Robichaud's report the observation was made that although the exact value of New Brunswick's fisheries cannot be determined so early after the close of the 1950 season, due to the fact that last year's stocks have not all been disposed of by the processors, assemblers, and wholesalers, it may be estimated that the total value of New Brunswick's fishery products last year will reach \$19,500,000. As for the catch, landings of flounders, pollock, herring, sardines, alewives and lobsters increased, while catches of cod, salmon and smelt showed slight decreases. Prices received for cod, herring and sardines were lower than in 1949, but prices for salmon, smelts and clams were higher; lobsters remained at the previous year's average.

The Census of the Fisheries

A detailed census of Canada's commercial fisheries will be undertaken this year. The first stage will be conducted in conjunction with the ten-year population census in June. The second will be carried out about October when fishing operations are at a minimum.

The first part of the census will request information from the commercial fishermen concerning the number of days spent in fishing in the previous 12 months; whether fishing on their own account, as a partner or on shares or for wages, and within which of four income-size groups their income from fishing falls.

In the second part of the census, a questionnaire will be distributed to fishermen, which will ask for details of vessels and equipment used, kinds of fish taken, expenses of operation, and other items that form part of the overall economic picture of the fisheries in relation to the fishermen.



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Where-to-Buy Directory

Companies whose names are starred (*) have display advertisements in this issue; see Index to Advertisers for page numbers

ANCHORS

Danforth Anchors, 2121 Allston Way, Berkeley, Calif.

*Northill Co., Inc., Los Angeles 45, Calif.

BATTERIES—Storage

Atlantic Battery Co., 59 Prentiss St., Boston 20, Mass.

"Exide": Electric Storage Battery Co., Allegheny Ave. and 19th St., Philadelphia, Pa.

*Surrette Storage Battery Co., Salem, Mass.

BOILERS—Heating & Burners

Elisha Webb & Son Co., 138 S. Front St., Philadelphia 6, Pa.

BOOTS

United States Rubber Co., Rockefeller Center, New York, N. Y.

CANS

Continental Can Co., 100 E. 42nd St., New York, N. Y.

CLOTHING

J. F. Carter Co., Beverly, Mass.

United States Rubber Co., Rockefeller Center, New York, N. Y.

COLD STORAGE

Quaker City Cold Storage Co., Philadelphia, Pa.

COMPASSES

John E. Hand & Sons Co., 243 Chestnut St., Philadelphia 6, Pa.

E. S. Ritchie & Sons, Inc., 112 Cypress St., Brookline, Mass.

Sperry Gyroscope Co., Division of the Sperry Corp., Great Neck, N. Y.

*Wilfrid O. White & Sons, Inc., 216 High St., Boston 10, Mass.

CORDAGE

American Manufacturing Co., Noble and West Sts., Brooklyn, N. Y.

*Columbian Rope Co., Auburn, N. Y.

The Edwin H. Fidler Co., Philadelphia 24, Pa.

*New Bedford Cordage Co., 131 Court St., New Bedford, Mass.

Tubbs Cordage Co., San Francisco, Calif.

DEPTH FINDERS

*Bendix Aviation Corp., Pacific Div., 475 Fifth Ave., New York 17, N. Y.

*Bludworth Marine, 92 Gold St., New York 7, N. Y.

Kaar Engineering Co., Palo Alto, Calif.

*Submarine Signal Division, Raytheon Manufacturing Co., 138 River St., Waltham 54, Mass.

*Wilfrid O. White & Sons, Inc., 216 High St., Boston 10, Mass.

DIRECTION FINDERS

Bludworth Marine, 92 Gold St., New York 7, N. Y.

Kaar Engineering Co., Palo Alto, Calif.

*Submarine Signal Division, Raytheon Manufacturing Co., 138 River St., Waltham 54, Mass.

ENGINE CONTROLS

Westinghouse Air Brake Co., Wilmerding, Pa.

ENGINES—Diesel

The Buda Co., Harvey, Ill.

Caterpillar Tractor Co., Peoria, Ill.

*Cooper-Bessemer Corp., Mount Vernon, O.

Cummins Engine Co., Columbus, Ind.

Cummins Diesel Engines of New England, Inc., 18 Hurley St., Cambridge 41, Mass.

Cummins Diesel Sales and Service of New York, Inc., 1030-1044 Leggett Ave., New York 55, N. Y.

*Detroit Diesel Engine Division, General Motors Corp., Series 71 Marine Diesel, 13400 W. Outer Drive, Detroit 23, Michigan.

The Edson Corp., 141 Front St., New Bedford, Mass.

*Enterprise Engine & Machinery Co., 18th and Florida Sts., San Francisco 10, Calif.

*Fairbanks, Morse & Co., Chicago, Ill.

Flagship Engine Co., Lynch Cove, Baltimore 22, Md.

Gray Marine Motor Co., 646 Canton Ave., Detroit, Mich.

P&H Diesel Engine Division, Harnischfeger Corp., 100 Lake St., Port Washington, Wis.

*The Lathrop Engine Co., Mystic, Conn.

*Lister-Blackstone Inc., 420 Lexington Ave., New York 17, N. Y.

Murphy Diesel Co., 5317 West Burnham St., Milwaukee, Wis.

*The National Supply Co., Engine Division, Springfield, Ohio.

*Nordberg Mfg. Co., Lincoln Bldg., 60 East 42nd St., New York 17, N. Y.

The Palmer Bros. Engine Corp., River Road, Cos Cob, Conn.

H. O. Penn Machinery Co., Inc., East River and 140th St., New York, N. Y.

*Perkins-Eaton Machinery Co., 376 Dorchester Ave., South Boston 27, Mass.

*Red Wing Motor Co., Red Wing, Minn.

Scripps Motor Co., 5817 Lincoln Ave., Detroit 8, Mich.

*Wolverine Motor Works Inc., 1 Union Ave., Bridgeport, Conn.

Worthington Pump & Machinery Corp., 421 Worthington Ave., Harrison, N. J.

ENGINES—Gasoline

*Chris-Craft, Marine Engine Div., Algonac, Mich.

*Chrysler Corp., 12211 East Jefferson, Detroit, Mich.

Flagship Engine Co., Lynch Cove, Baltimore 22, Md.

Gray Marine Motor Co., 646 Canton Ave., Detroit, Mich.

*The Lathrop Engine Co., Mystic, Conn.

*Nordberg Mfg. Co., Lincoln Bldg., 60 East 42nd St., New York 17, N. Y.

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*Red Wing Motor Co., Red Wing, Minn.

Scripps Motor Co., 5817 Lincoln Ave., Detroit 8, Mich.

*Universal Motor Co., 436 Universal Drive, Oshkosh, Wis.

FISHING GEAR

*F. J. O'Hara Trawling Co., 211 Northern Ave., Boston 10, Mass.

*Westerbeke Fishing Gear Co., Inc., 279 Northern Ave., Boston, Mass.

FISH MEAL MACHINERY

Enterprise Engine & Machinery Co., Process Machinery Div., 18th and Florida Sts., San Francisco, Calif.

FLOATS

New England Fishing Gear Co., 301 Eastern Ave., Chelsea, Mass.

J. H. Shepherd Son & Co., 1820 East Ave., Elyria, Ohio.

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The Buda Co., Harvey, Ill.

*Detroit Diesel Engine Division, General Motors Corp., Series 71 Marine Diesel, 13400 W. Outer Drive, Detroit 23, Michigan

*The Harris Co., Portland, Me.

*Lister-Blackstone Inc., 420 Lexington Ave., New York 17, N. Y.

*D. W. Onan & Sons, Inc., University Ave., S.E., Minneapolis 14, Minn.

*Universal Motor Co., 436 Universal Drive, Oshkosh, Wis.

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The Imperial Electric Co., Akron, Ohio.

*D. W. Onan & Sons, Inc., University Ave., S.E., Minneapolis 14, Minn.

HOOKS

Bill DeWitt Div., Hook Mfrs., Auburn, N. Y.

*O. Mustad & Son, Oslo, Norway.

*"Pfueger": Enterprise Mfg. Co., 110 Union St., Akron, Ohio.

ICE BREAKERS

Gifford-Wood, Hudson, N. Y.

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Radiomarine Corp. of America, 75 Varick St., New York 13, N. Y.

Sperry Gyroscope Co., Division of the Sperry Corp., Great Neck, N. Y.

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*W. A. Augur, Inc., 35 Fulton St., New York, N. Y.

Brownell & Co., Inc., Moodus, Conn.

*R. J. Ederer Co., 540 Orleans St., Chicago, Ill.

The Fish Net & Twine Company, 310-312 Bergen Ave., Jersey City, N. J.

*The Linen Thread Co., Inc., 105 Maplewood Ave., Gloucester, Mass.

Joseph F. Shea, Inc., East Haddam, Conn.

A. M. Starr Net Co., East Hampton, Conn.

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Eso Standard Oil Co., 26 Broadway, New York 4, N. Y.

Gulf Oil Corp., Gulf Bldg., Pittsburgh, Pa.

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Advanced Marine Products Corp., 211 Northern Ave., Boston 10, Mass.

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*International Paint Co., Inc., 21 West St., New York, N. Y.

George Kirby, Jr. Paint Co., 14 Wall St., New Bedford, Mass.

Pettit Paint Co., Belleville, N. J.

*Pittsburgh Plate Glass Co., Pittsburgh, Pa.

*C. A. Woolsey Paint & Color Co. Inc., 229 East 42nd St., New York 17, N. Y.

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*Albina Engine & Machine Wks., 2100 N. Albina Ave., Portland, Oregon

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Federal Propellers, Grand Rapids, Mich.

*Hyde Windlass Co., Bath, Me.

*Michigan Wheel Co., Grand Rapids, Mich.

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The International Nickel Co., Inc., 67 Wall St., New York 5, N. Y.

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*Eco Engineering Co., 12 New York Ave., Newark 1, N. J.

The Edson Corp., 141 Front St., New Bedford, Mass.

Marine Products Co., 515 Lycaste Ave., Detroit 14, Mich.

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Radiomarine Corp. of America, 75 Varick St., New York 13, N. Y.

*Submarine Signal Div., Raytheon Mfg. Co., 138 River St., Waltham 54, Mass.

RADIO TELEPHONES

- *Hudson American Corp., 25 West 43rd St., New York 18, N. Y.
- Jefferson-Travis, Inc., 76 Ninth Ave., New York 11, N. Y.
- Kaar Engineering Co., Palo Alto, Calif.
- Radiomarine Corp. of America, 75 Varick St., New York 13, N. Y.
- *Standard Electronics Corp., 25 W. 43rd St., New York 18, N. Y.
- *Submarine Signal Div., Raytheon Mfg. Co., 138 River St., Waltham 54, Mass.

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- "Shipmate": Stamford Foundry Co., Stamford, Conn.
- "WebbperfectionN" Elisha Webb & Son Co., 138 S. Front St., Philadelphia 6, Pa.

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- Auto Engine Works, Inc., 333 A. North Hamline Ave., St. Paul, Minn.
- *Snow-Nabstedt Gear Corp., Welden St., Hamden, Conn.
- Twin Disc Clutch Co., 1341 Racine St., Racine, Wis.
- G. Walter Machine Co., 84 Cambridge Ave., Jersey City 7, N. J.
- Western Gear Works, 2600 E. Imperial Highway, Lynwood, Calif.

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- Sudbury Laboratory, Box 780, South Sudbury, Mass.

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- Bethlehem Steel Co., Shipbuilding Division, East Boston 28, Mass.
- Bristol Yacht Bldg. Co., So. Bristol, Me.
- Delaware Bay Shipbuilding Co., Inc., Leesburg, N. J.
- Diesel Engine Sales Co., Inc., St. Augustine, Fla.
- *Liberty Dry Dock, Inc., Foot of Quay St., Brooklyn 22, N. Y.
- Muller Boat Works, Inc., East 69th St. and Ave. V., Brooklyn 34, N. Y.
- *Frank L. Sample, Jr., Inc., Boothbay Harbor, Me.
- *Story Marine Railway, So. Portland, Me.

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- The Edison Corp., 141 Front St., New Bedford, Mass.
- Sperry Gyroscope Co., Division of the Sperry Corp., Great Neck, N. Y.

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- *"Goodrich Cutless": Lucian Q. Moffitt, Inc., Akron 8, Ohio.
- Hathaway Machinery Co., Inc., New Bedford, Mass.

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- Wharf Machine & Electric Co., Inc., Fish Pier Road, Boston 10, Mass.

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- Cunningham Mfg. Co., 4200 West Marginal Way, Seattle 6, Wash.

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- Bodine & Dill (formerly Hettinger Engine Co.), Bridgeton, N. J.
- Bromfield Mfg. Co., Inc., 246-256 Border St., East Boston 28, Mass.
- Hathaway Machinery Co., Inc., New Bedford, Mass.
- *Stroudsburg Engine Works, 62 North 3rd St., Stroudsburg, Penn.

WIRE ROPE

- *American Steel & Wire Co., Rockefeller Bldg., 614 Superior Ave., Cleveland 13, Ohio
- Bethlehem Steel Co., Bethlehem, Pa.
- *John A. Roebling's Sons Co., Trenton 2, N. J.
- *Wickwire Spencer Steel Division, Palmer, Mass.

Sounding-Lead

(Continued from page 9)

applies to canned Maine and California sardines, domestic tuna, mackerel, shrimp, oysters, etc.

Specifically exempted from the order are fish meal, fish scrap, fish solubles, specialty fish feed products, fish oils, including cod oil and shark oil, whale oil and sperm oil.

FROZEN FISH CEILINGS

The exempting of frozen fish from price control was recommended by the Industry Advisory Committee for Fresh and Frozen Fish at a meeting in Washington, D. C. April 16 and 17. The meeting was held in the Department of the Interior building under the joint auspices of the Defense Fisheries Administration, the Office of Price Stabilization, and the Department of Agriculture for the purpose of exchanging information and discussing problems of maintaining a high production of seafood despite shortages of materials and manpower.

Secretary of the Interior Oscar L. Chapman, who opened the meeting, declared that "food is as essential as guns in the mobilization program, and fish is an important segment of food."

One session was devoted to production problems and presided over by Maurice Rattray, Deputy Administrator of DFA. F. Marion Rhodes, director, Office of Requirements and Allocations, PMA, Department of Agriculture, discussed the general agriculture situation and the program being followed as a means to increase production of most agricultural commodities.

The possible military requirements for fish during the coming year were examined by George A. Baxter, chief, Perishables Section, Subsistence Branch, Office of Quartermaster General.

Lewis D. Barton, Industry Relations, Employment Service, Department of Labor, talked on the present aspects of the manpower situation, while Col. Lewis F. Kosch, Chief, Manpower Division, National Headquarters, Selective Service System, spoke on the function of the Selective Service System, and the possibilities of obtaining deferments for fishermen in critical positions.

Methods of adjusting wage rates controlled under the January 25 freeze order were explained by Curtis Aller, chief, Policy Appraisal Branch, Wage Stabilization Board.

Edward A. Power, chief, Branch of Material Facilities, DFA, spoke on shortages of materials and priorities assistance, as well as the possible impact of a controlled materials plan on the fishing industry, while the probability of increased imports of many varieties of fish was discussed by A. W. Anderson, chief, Branch of Commercial Fisheries, Fish & Wildlife Service.

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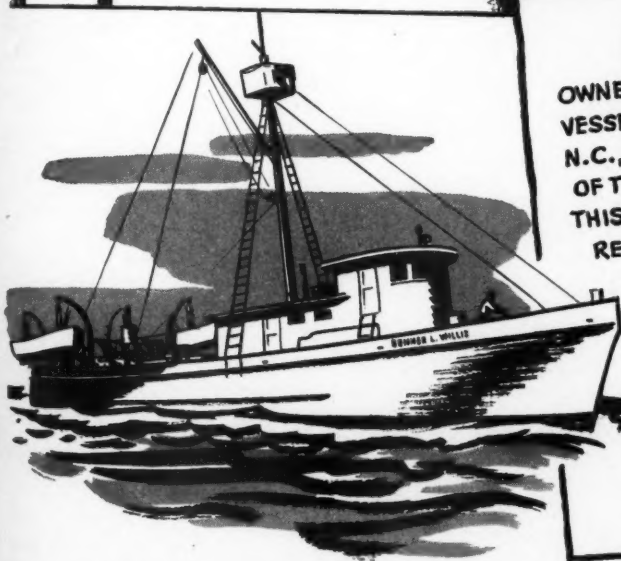


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TO FIND THESE MIGRATING FISH.

CAPTAIN WILLIS WRITES—

"I WOULD RATHER DO WITHOUT MY
RADIO THAN MY BENDIX. IT IS THE
MOST PROFITABLE INVESTMENT I
EVER MADE. WE CAUGHT FISH THIS
YEAR THAT WE NEVER COULD SEE!"

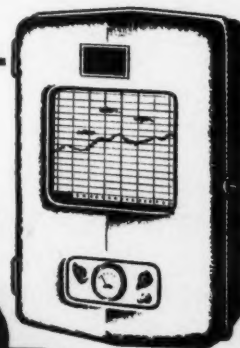


THE FAMOUS BENDIX FISH FINDER IS CONSISTENTLY
EARNING MORE MONEY FOR COMMERCIAL FISHER-
MEN AROUND THE WORLD. YOU, TOO, WILL
CATCH MORE FISH WITH A BENDIX!

WRITE THE FACTORY TODAY
FOR COMPLETE INFORMATION—

Pacific Division

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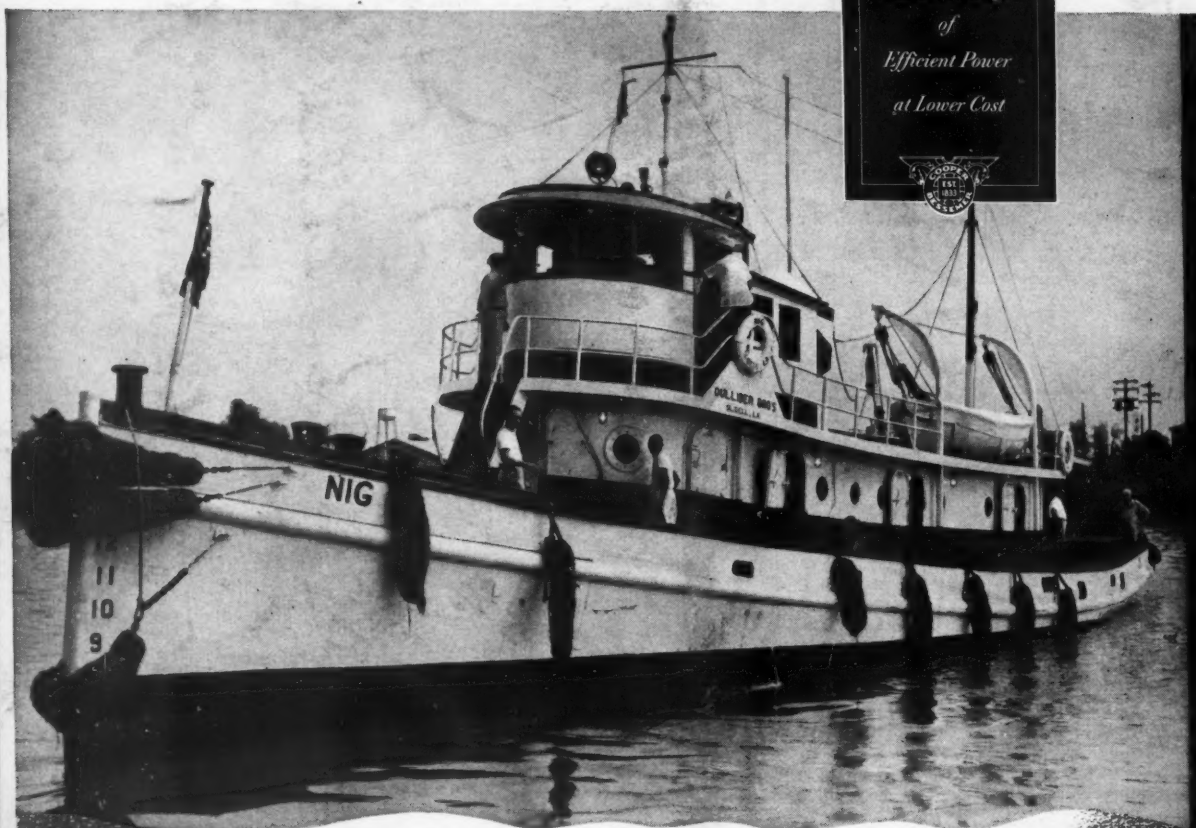


Bendix

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FOR THE NIG...

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LIFE BEGINS AT 70

...with Cooper-Bessemer Power

THE tug shown above began her career back in 1880 — as a steamer along the Atlantic Coast. Bought in 1949 by Oulliber Bros., she was renamed the "Nig", was converted from steam to modern Cooper-Bessemer diesel power at the Calmes Shipyard, New Orleans.

Then this past summer the "Nig" sank. After being raised she was rebuilt by Avondale Marine Ways, Inc., and is now back in full-time service.

The "Nig's" 1100 hp Cooper-Bessemer diesel makes her one of the most powerful

tugs on the Intracoastal Waterway . . . makes her a favored boat for many of the toughest towing jobs. And, one thing is sure, with a power plant like that modern reliable Cooper-Bessemer in her engine room, the "Nig" is set for *another* lifetime of hard, profitable work. You can't do better than a Cooper-Bessemer.

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